

Data papers as a valuable reporting tool to improve the management and conservation of vertebrate populations in Europe

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Data is essential for wildlife management and conservation

Management of
wildlife requires to
quantify distribution
and abundance of
species.

New research



Data is
essential.

Open Access

Standardized

Large datasets

Long term

Large scales

EUROPABON

Valdez et al., (2023).
Ecography, 2023: e06604

Lack of available
data!

How was the
data generated?



Data papers

Document all changes in a dataset



Metadata is included

Open-Access 

Citable

FAIR datasets

Update some common species distribution in Spain

To update the presence-only of the last 10 years of 8 species of ungulates and 1 canid in mainland Spain.

- To make it open access.
- To describe the process transformation from data collection to presence-only data.



scientific data

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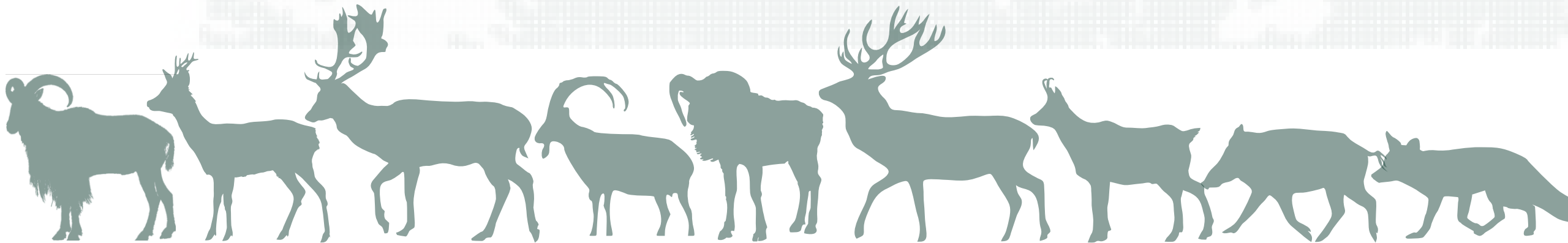
Data Descriptor | [Open access](#) | Published: 10 February 2025

Presence-only data for wild ungulates and red fox in Spain based on hunting yields over a 10-year period

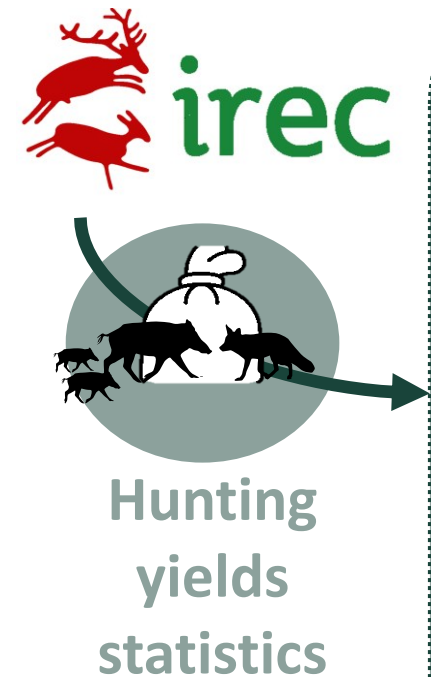
[Sonia Illanas](#) , [Javier Fernández-López](#), [Joaquín Vicente](#), [Carmen Ruiz-Rodríguez](#), [Sergio López-Padilla](#), [Mario Sebastián-Pardo](#), [Ludovica Preite](#), [Azahara Gómez-Molina](#), [Pelayo Acevedo](#) & [José Antonio Blanco-Aguilar](#)

[Scientific Data](#) **12**, Article number: 236 (2025) | [Cite this article](#)

1520 Accesses | **10** Altmetric | [Metrics](#)



Data source



1. Time

- A. Yearly updated (hunting season),
- B. Long term databases.

2. Space

- A. Cover most countries' territory,
- B. Spatially referenced.

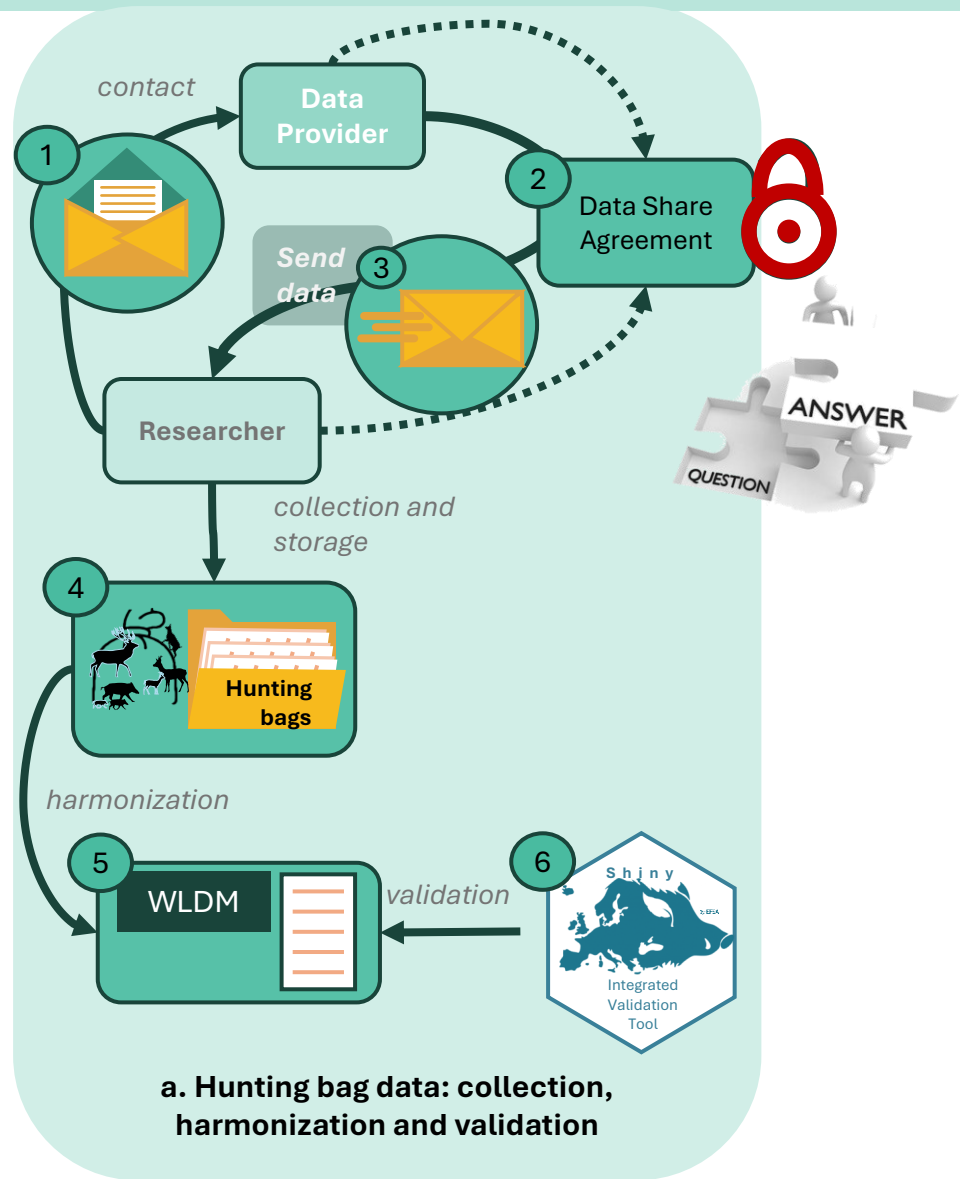
3. Number of individuals harvested.

All administrative regions of Spain provided data

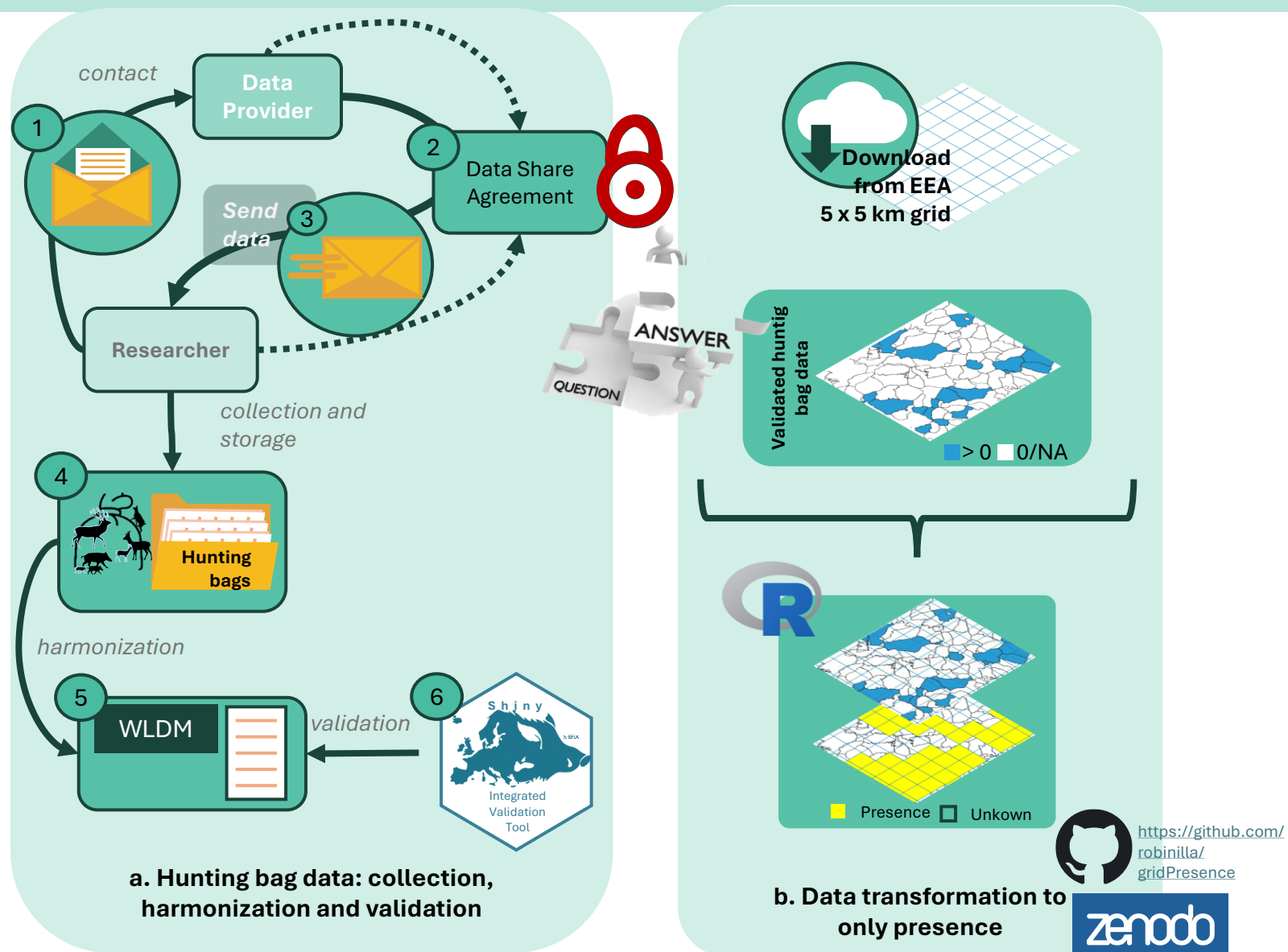
Diputación Foral de Álava, Diputación Foral de Bizkaia, Diputación Foral de Gipuzkoa, Generalitat de Cataluña, Generalitat Valenciana, Gobierno de Aragón, Gobierno de Cantabria, Gobierno de la Comunidad de Madrid, Gobierno de la Región de Murcia, Gobierno de La Rioja, Gobierno del Principado de Asturias, Gobierno de Navarra, Junta de Andalucía, Junta de Castilla y León, Junta de Comunidades de Castilla-La Mancha, Junta de Extremadura, Junta de Galicia.

Thank you all!

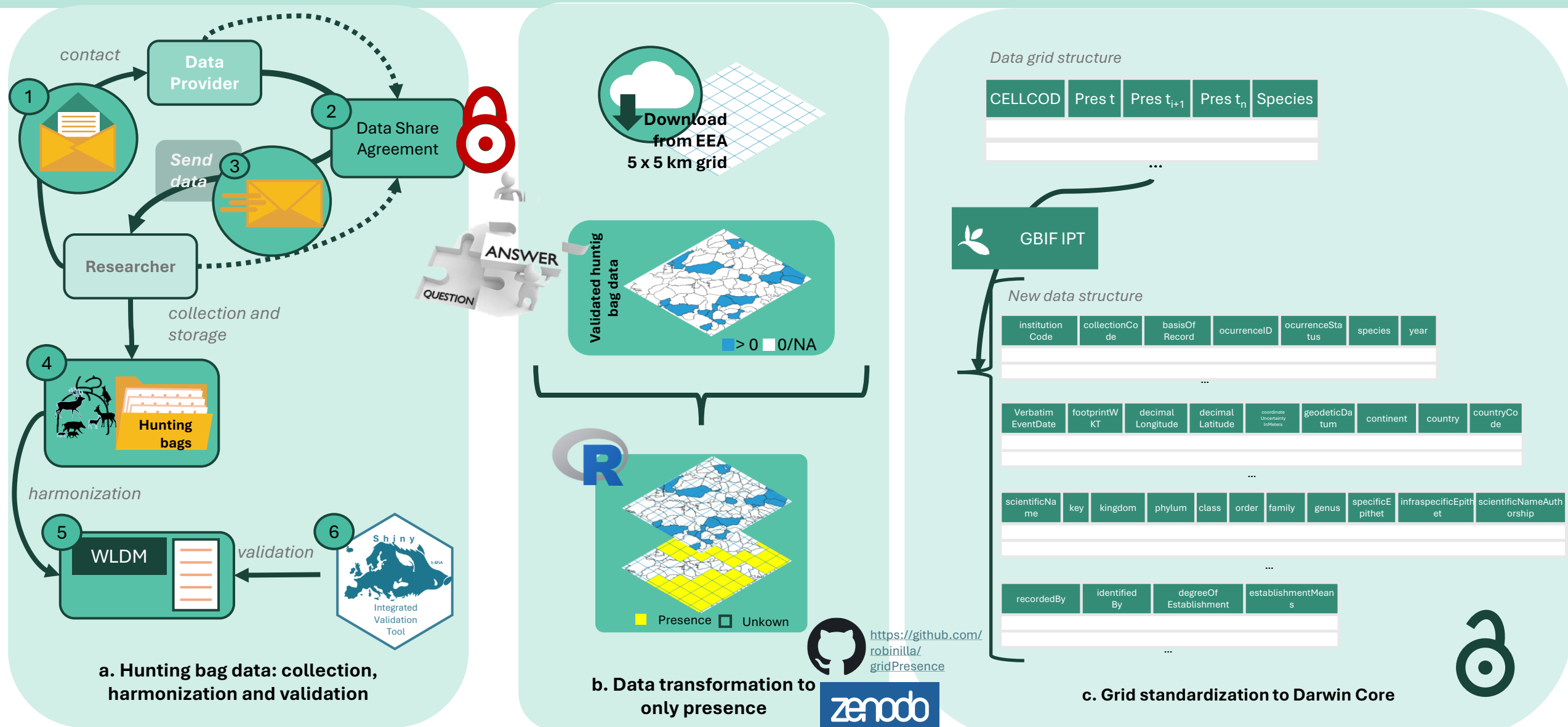
Data transformation to presence-only



Data transformation to presence-only



Data transformation to presence-only



Data transformation to presence-only

contact

Data

Data grid structure

<https://www.gbif.org/es/>

OCCURRENCE DATASET | REGISTERED SEPTEMBER 12, 2024

Data set: Only-presence data for wild ungulates and red fox in Spain based on hunting yields

Published by [Instituto de Investigación en Recursos Cinegéticos \(IREC /CSIC-UCLM-JCCM\)](#)

Illanas S • Fernández-López J • Vicente J • Ruiz-Rodríguez C • López-Padilla S • Sebastián-Pardo M • Preite L • Gómez-Molina A • Acevedo P • Blanco-Aguilar J A

DATASET

PROJECT

METRICS

ACTIVITY

↓ DOWNLOAD

1,818,198 OCCURRENCES

The data sets provide long-term information of the only-presence of eight wild ungulates and red fox derived from harvest data from Spain in a 5 x 5 squared grid (21,836 cells) of the European Environment Agency. The collected data has been processed and reported yearly, in accordance with Habitats Directive from the European Union to facilitate data reporting about the State of nature. Data sets are structured following the Darwin Core biological standard. The information will be updated periodically to cover missing data. Dataset is under external review and will be released as soon as possible.

**Project ID:** IREC-BigGameOccurrences13-22**Publication date:** November 13, 2024**Metadata last modified:** November 13, 2024**Hosted by:** GBIF-Spain**Licence:** CC BY 4.0
 How to cite
  DOI
 [10.15470/lve3wn](https://doi.org/10.15470/lve3wn)


only presence

zenodo

of data standardization to Darwin Core

Presence-only data

Species: game species

8 ungulates
1 carnivore

Long term information



2013/2014 a
2022/2023

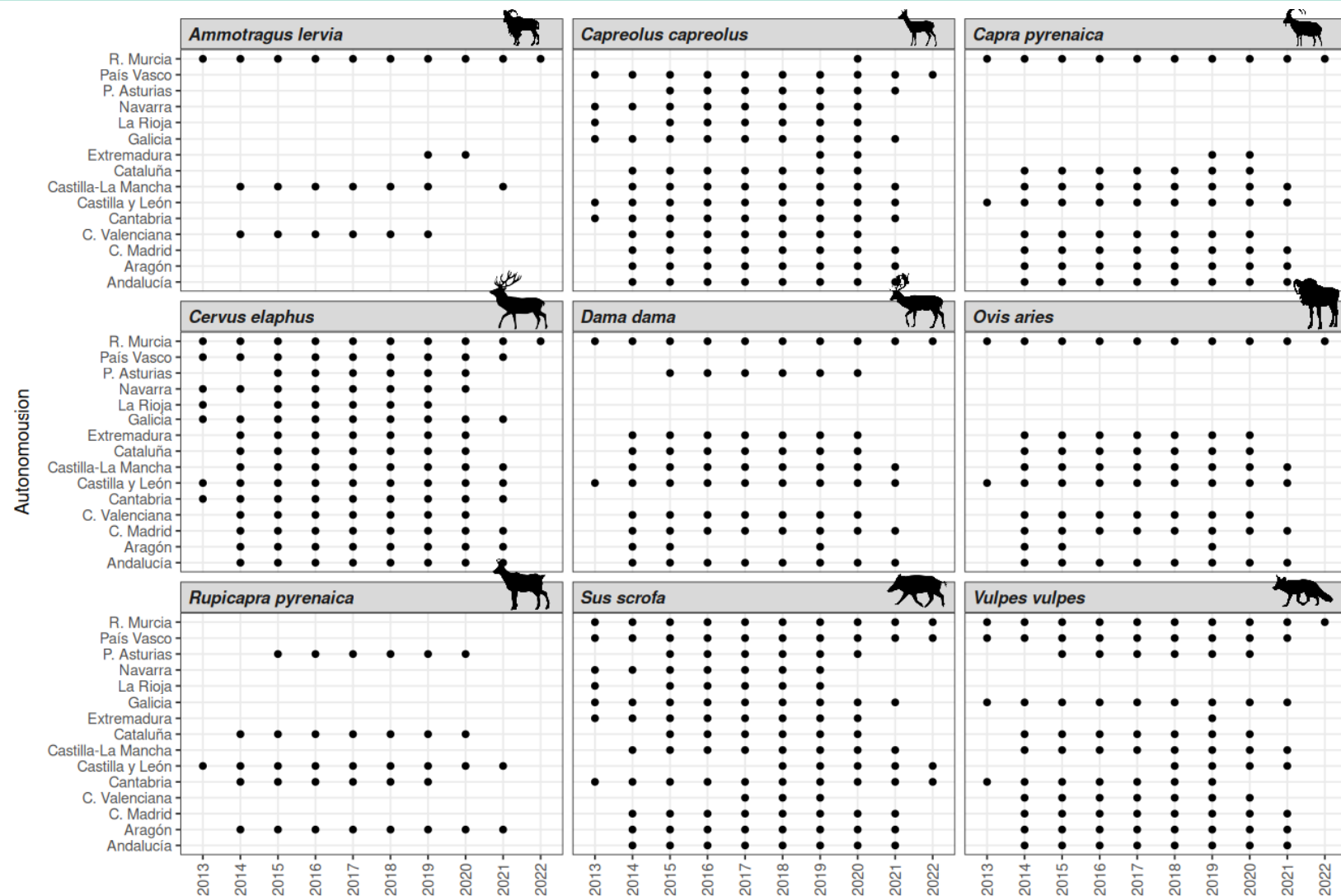
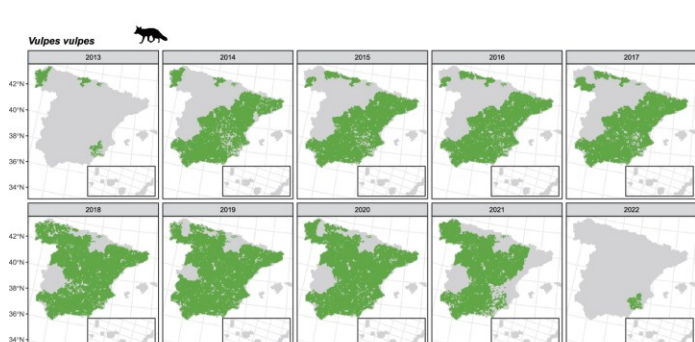
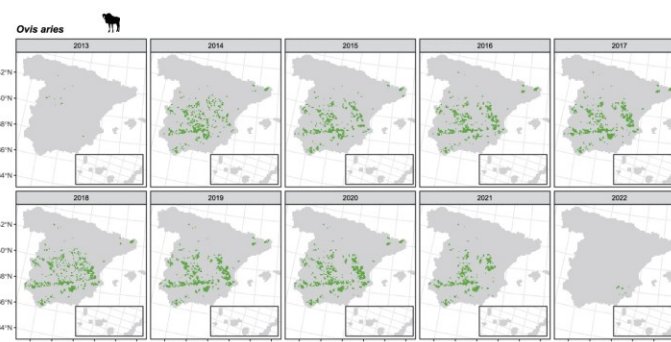
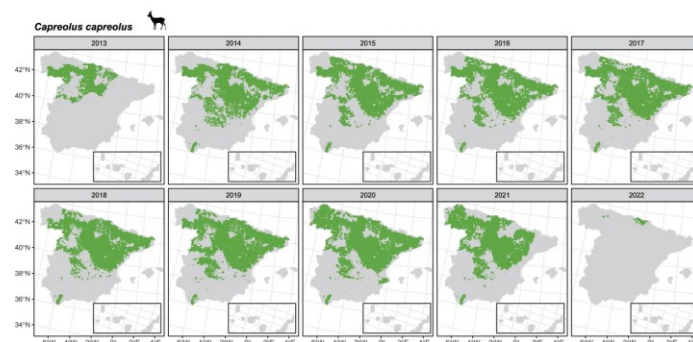
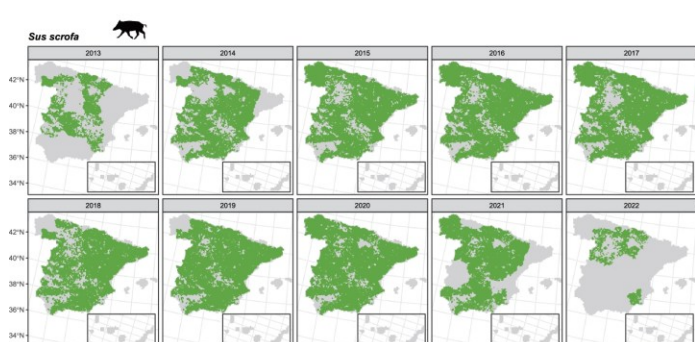
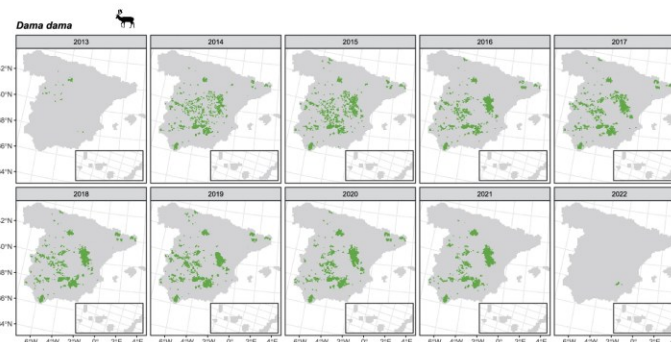
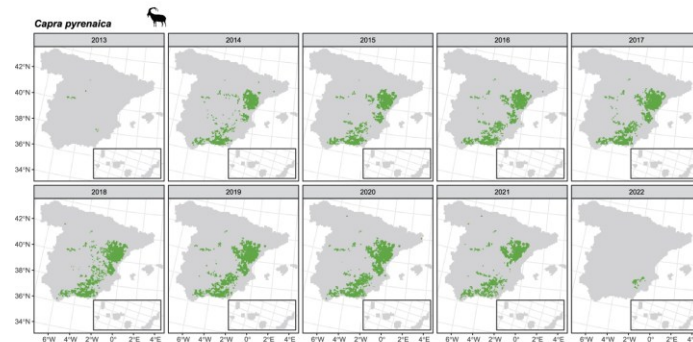
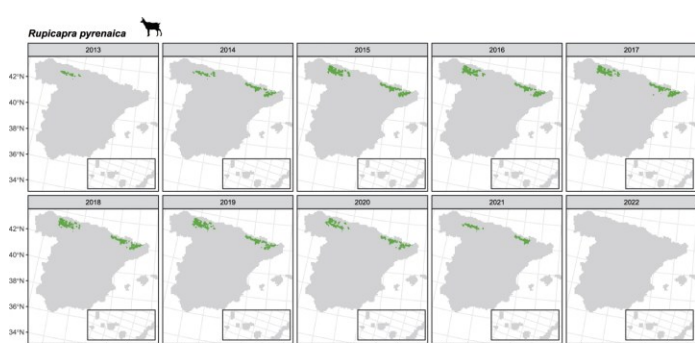
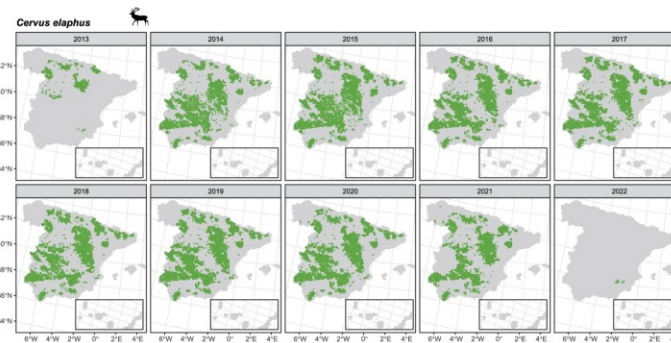
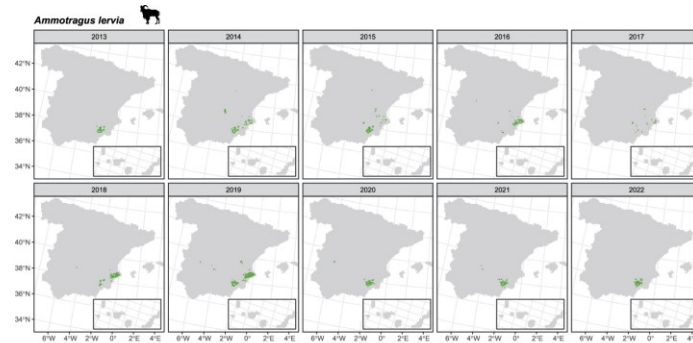


Fig. 2 Autonomous Communities (Spain administrative regions) that reported data of hunting yield for each game species.

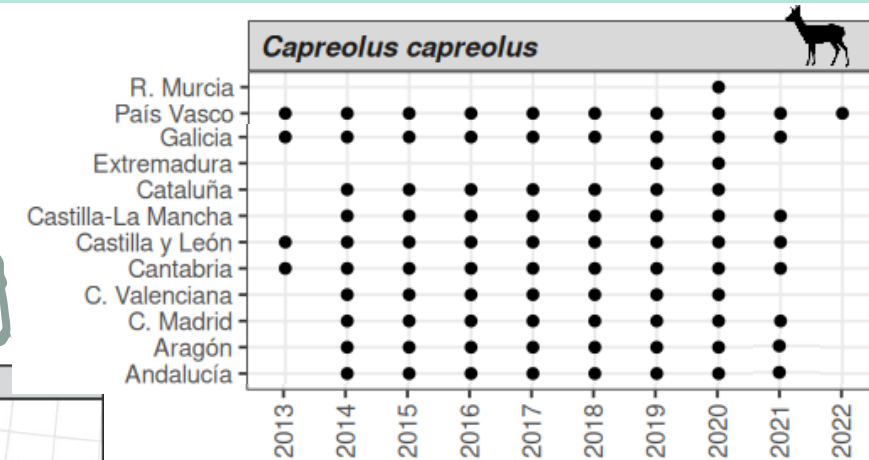
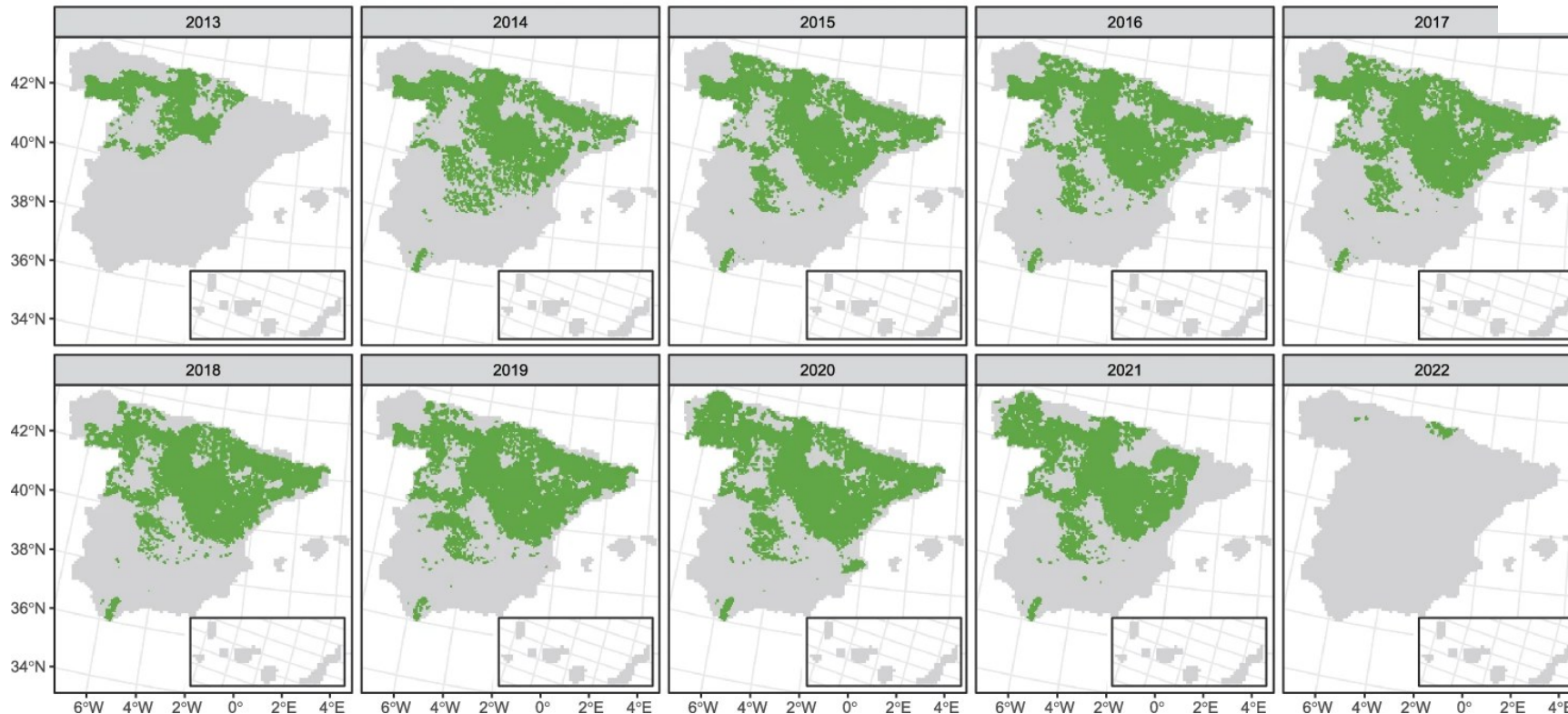
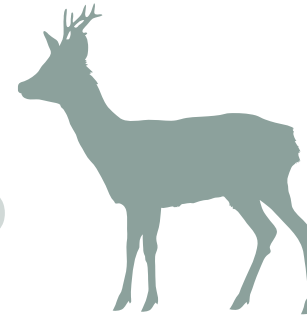
Presence-only data

Space: 21 836 grid cells x 25 km²



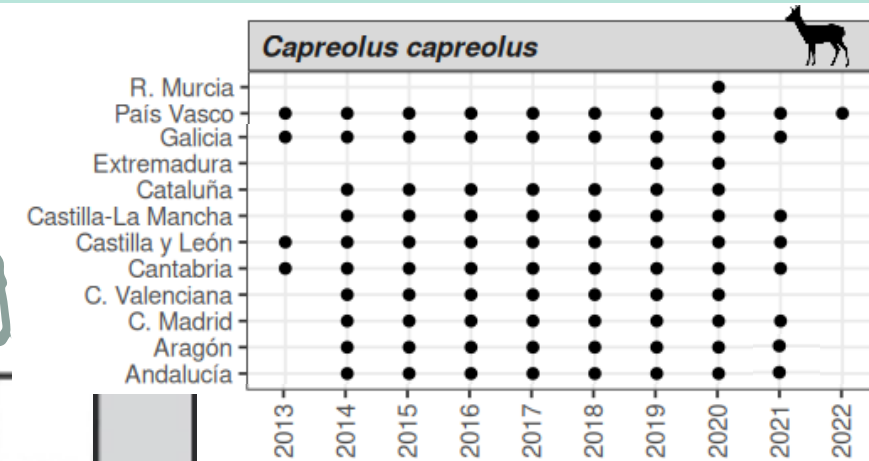
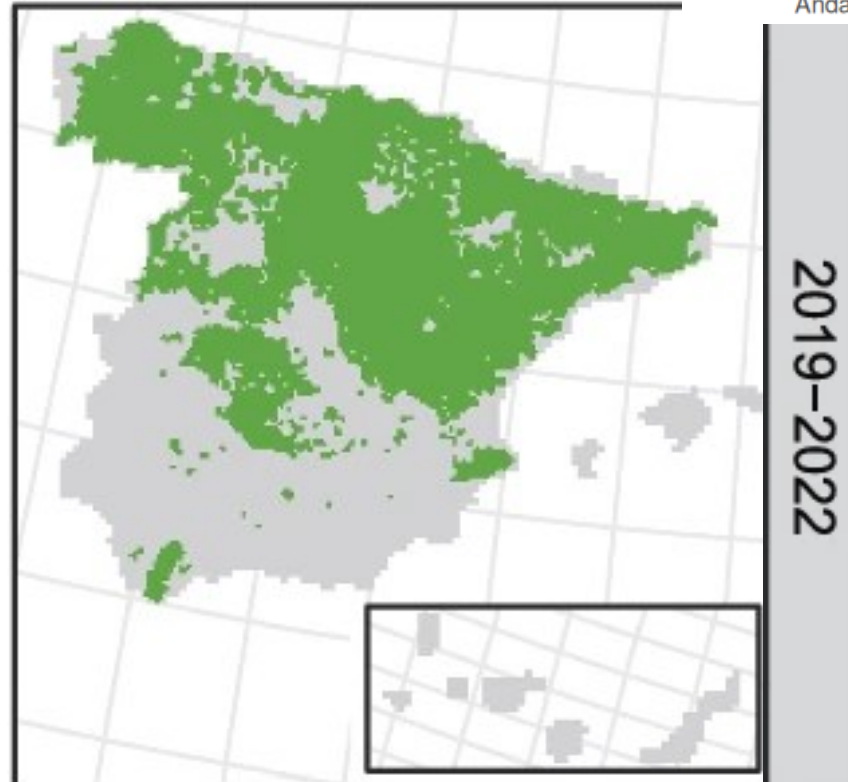
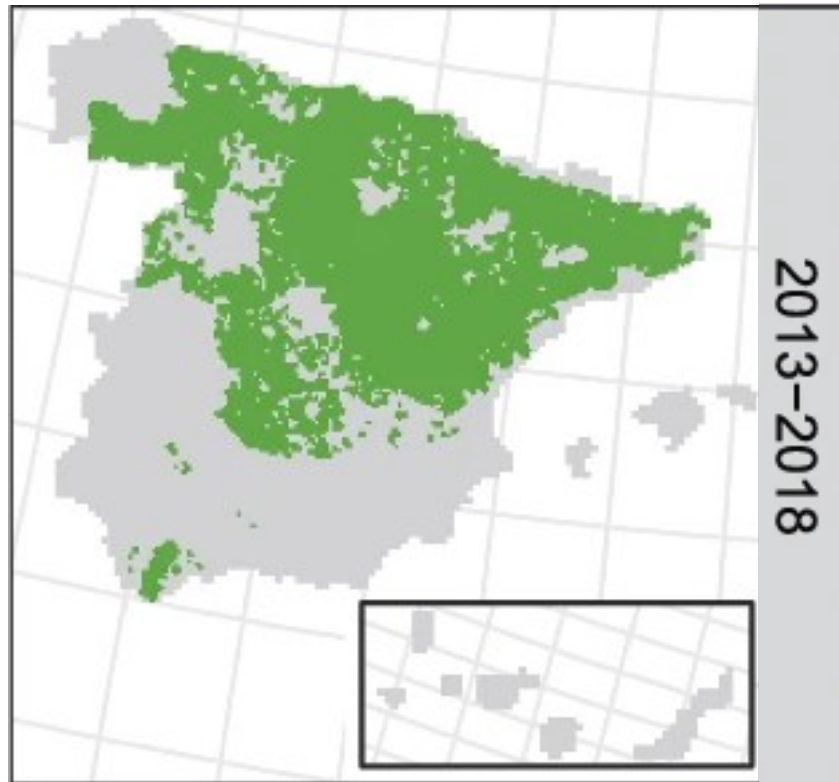
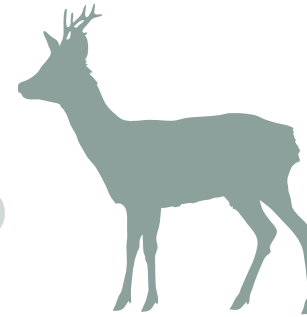
Presence-only data

Expansion range?



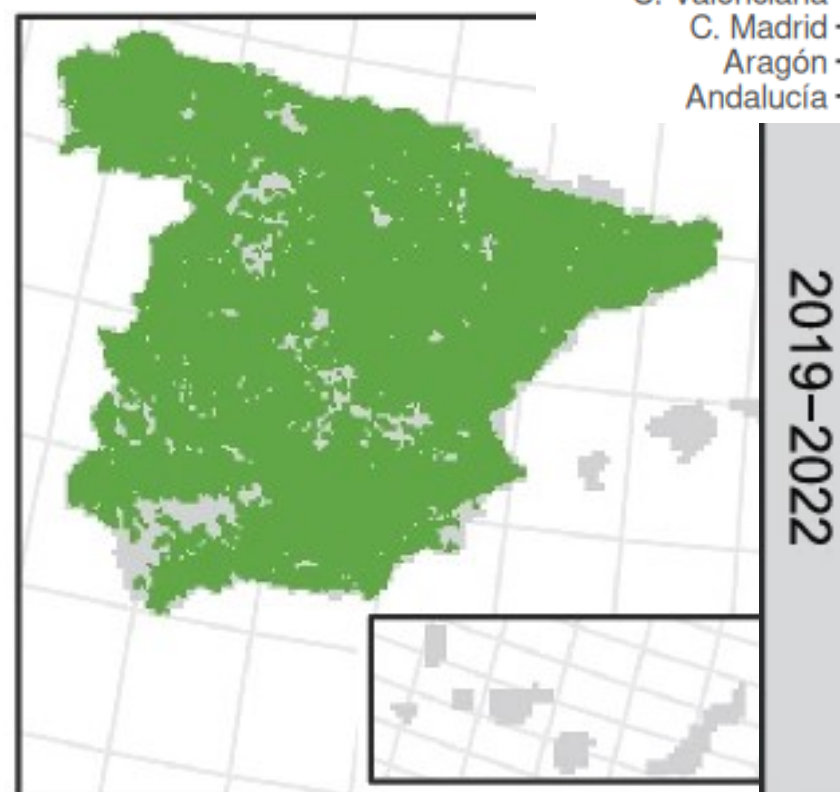
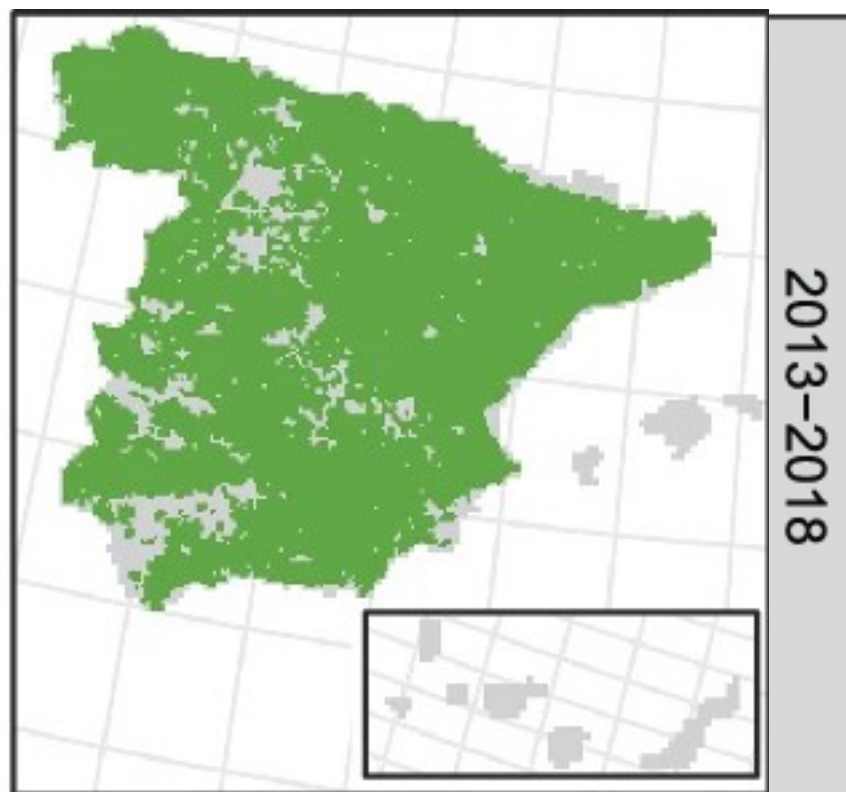
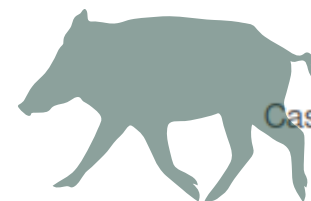
Presence-only data

Expansion range?



Presence-only data

Colonizing more areas?



Sus scrofa 

R. Murcia	•	•	•	•	•	•	•	•	•	•	•
País Vasco	•	•	•	•	•	•	•	•	•	•	•
Galicia			•	•	•	•	•	•	•	•	•
Extremadura	•	•	•	•	•	•	•	•	•	•	•
Cataluña	•	•	•	•	•	•	•	•	•	•	•
Castilla-La Mancha	•	•	•	•	•	•	•	•	•	•	•
Castilla y León		•	•	•	•	•	•	•	•	•	•
Cantabria											
C. Valenciana	•	•	•	•	•	•	•	•	•	•	•
C. Madrid											
Aragón		•	•	•	•	•	•	•	•	•	•
Andalucía		•	•	•	•	•	•	•	•	•	•
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	

Conclusions

1. The proposed framework demonstrated the feasibility of sharing datasets with data sharing restrictions. It can be applied by other EU countries, monitoring programs, species, *etc.*
2. The publication of data papers by the scientific community following UE standards for biodiversity data reporting is set to become essential in the frame of future biodiversity monitoring schemes in Europe; such as the proposed EU Biodiversity Observation Coordination Centre (EBOCC).
3. This study illustrates the value of data papers to publicly provide information that subsequently can easily contribute to data reporting by countries; facilitating the early mobilization of data and reducing workload by national administrations (which often struggle to transfer complete and up-to-date quality data).

Publishing OA datasets benefits biodiversity

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REAM GROUP



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Hvala Lepo

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- Illanas, S., Fernández-López, J., Vicente, J. *et al.* (2025). Presence-only data for wild ungulates and red fox in Spain based on hunting yields over a 10-year period. *Sci Data* **12**, 236 <https://doi.org/10.1038/s41597-025-04574-z>
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