

Data Openness in Ecology

Dmitry Schigel¹, Anders G. Finstad², Donald Hobern¹

1. **GBIF Secretariat**. Universitetsparken 15, DK-2100 Copenhagen Ø, Denmark
2. **NTNU University Museum**. Erling Skakkes gate 47 A, Trondheim NO-7491, Norway

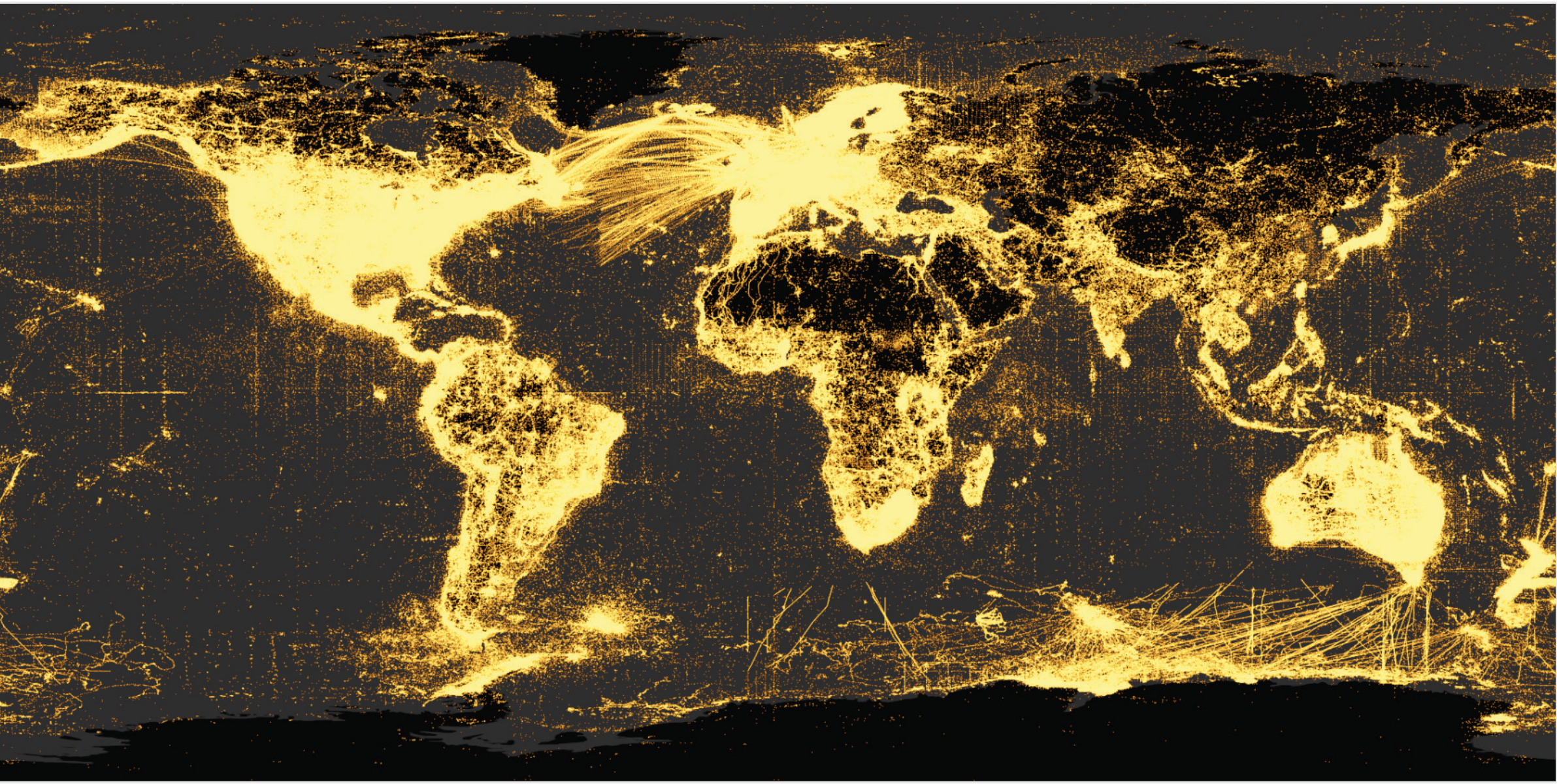
Transparency, reproducibility and trust are fundamental principles of science.

Open data can play a central role in supporting these principles through the incentive systems provided by funders, publishers and communities of practice, as well as individual ethical commitments.

But despite the central role of data in ensuring the transparency and credibility of scientific results and conclusions, field-specific academic and cultural traditions heavily influence the adoption of openness, and in ecological research, open data remains, at best, neglected, due to perceived barriers to data presentation, archiving, access and citation.

Still, open data supports transparent, innovative science in ecological research. Data users and data publishers can both benefit from freely available, consistently structured citable ecological data.

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What is...  **GBIF** | Global Biodiversity Information Facility

GBIF—the Global Biodiversity Information Facility—is an open-data research infrastructure funded by the world’s governments and aimed at providing anyone, anywhere access to data about all types of life on Earth.

The GBIF network provides data-holding institutions around the world with open-source tools and common standards that enable them to share consistent data about where and when species have been recorded.

What can you do with GBIF.org ?

Publish data

Organizations register to share standardized data, and each dataset is issued a persistent identifier in the form of a **DOI**, or digital object identifier.

Access data

Browse, filter and download search results from multiple sources for your research and analysis, or import data by connecting directly with the GBIF API using R or Python tools and scripts.

Use data

GBIF.org is the world’s largest index of primary biodiversity data, bringing together information from more than 1,100 institutions. Researchers can use it alone Data postprocessing and edits needed, but eased by data provided on structured and standardized formats.

Cite data

GBIF.org assigns each download a DOI, providing a highly efficient tool citing all the datasets (and crediting all the institutions) that contribute to your resulting research. Even the largest, most complex searches can credit all data providers in a few lines.

Be transparent, be FAIR—cite your downloads using DOIs!

What types of datasets are supported?

COLLECTIONS METADATA

FULL TITLE
BOS Arthropod Collection of University of Oviedo (Spain): Op events subset

DESCRIPTION
In this study, we analyse the relevance of harvestmen distribution, opportunistic, unplanned, and non-standardised collection of the Iberian Peninsula. Using specimens deposited in the University of Oviedo, we compared these data with data and periodic collections with pitfall traps in several locations. Arthropod Collection, begun in 1977, includes specimens of types, and its recent digitisation allows for this type of comparison.

SPECIES CHECKLISTS



SPECIES OCCURRENCES



Presence-only data

SAMPLED ORGANISMS



Presence-absence and abundance

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Ecology content and use welcome

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