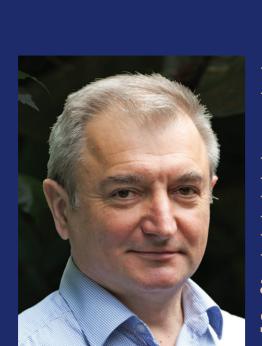
# DATA PAPERS AS INCENTIVES FOR OPENING BIODIVERSITY DATA: ONE YEAR OF EXPERIENCE AND PERSPECTIVES FOR THE FUTURE





**Lyubomir Penev** 

**Institute for Biodiversity and Ecosystem Research** and Pensoft Publishers, Sofia, Bulgaria



Vishwas Chavan

**Global Biodiversity Information Facility,** Copenhagen, Denmark



**Teodor Georgiev** 

Pensoft Publishers, Sofia, Bulgaria



**Pavel Stoev** 

**National Museum** of Natural History and Pensoft Publishers, Sofia, Bulgaria

## What is a Data Paper?

- A Data Paper is a scholarly journal publication whose primary purpose is to describe a dataset or a group of datasets, rather than to report a research investigation. As such, it contains facts about data, not hypotheses and arguments in support of the data, as found in a conventional research article. Its purposes are three-fold:
- to provide a citable journal publication that brings scholarly credit to data publishers;
- to describe the data in a structured human-readable form;
- to bring the existence of the data to the attention of the scholarly community.

#### The future

Elaborating formats for descriptions of various kinds of data (ecological, morphological, genomic, environmental, etc.). Link to various platforms (GBIF, Scratchpads, Dryad, EDIT, CBOL, etc.) to provide automated data paper submission.

# What a Data Paper includes?

The Data Paper should include several important elements (usually called metadata, or "description of data") that document, for example:

- methods of data collection;
- taxa covered;
- spatialandtemporalrangesandgeographicalcoverage;
- collectors and owners of the data;
- software used to create or view the data.

The metadata can be used to form a Data Paper manuscript.

An important feature of Data Papers is that they should always be linked to the published datasets they describe, and that link (a URL, ideally resolving a DOI) should be published within the paper itself. Conversely, the metadata describing the dataset held within data archives should include the bibliographic details of the Data Paper once that is published, including a resolvable DOI.

At the time of submission of the Data Paper manuscript, the data described should be freely available online in a public repository under a suitable data license, so that they can be retrieved for reuse, resampling and redistribution by anyone for any purpose, subject to one condition at most that of proper attribution using scholarly norms.

### Examples of data papers

GBIF and Pensoft pioneered a workflow between the GBIF's Integrated Publishing Toolkit (IPT) and Pensoft's journals ZooKeys, PhytoKeys, MycoKeys, Nature Conservation, etc. to automatically export metadata into the form of a data paper manuscript, based on the Ecological Metadata Language (EML).









Data published through GBIF: http://ipt.biodiversity.aq/resource.do?r=macrobenthos



