IUCN SSC Species Monitoring Specialist Group Database of Global Data Sources for Biodiversity Conservation Monitoring

Responses to Frequently Asked Questions

Version of August 2023

What is in the database?
We present a list of global data sources that may be of use in monitoring biodiversity for conservation purposes. We categorise the data according to its potential use for monitoring state, pressure or response indicators. We also present a list of reports that synthesize global data.

What is a data source?
There are many types of data repository and many terms used for them, such as data set, database, data tool, data platform, data portal... Some use primary data, some use secondary data. For simplicity, we use the term 'data source' to cover all forms, whether they are primary or secondary sources. However, we acknowledge the need to develop a typology of data sources in the near future to help people differentiate between them.

Who compiled the database?
The database of data sources was put together by PJ Stephenson with support from Carrie Stengel and was made possible with funding from Re:wild (formerly Global Wildlife Conservation). Production of Version 2 and Version 3.0 was supported by funds from the Swiss Network for International Studies to the University of Lausanne through the project Unblocking the Flow of Biodiversity Data for Multi-Stakeholder Environmental Sustainability Management. Angela Ruiz de Paz helped compile new material for the update. The web portal to access the database (https://datasources.speciesmonitoring.org/) was created by Nathanaël Langlois.

What criteria were used to select data sources?
Data sources are included in the inventory if they:
- have potential relevance for monitoring biodiversity state, pressures and responses at the global level by key stakeholders (governments, international organizations, civil society and NGOs, conservation agencies and businesses striving for sustainability);
- contain at least some time-series data (or there are plans to add time-series data);
- are up to date (with data added in the last 5 years or so).

The most useful data sources would have large volumes of widespread data that were scalable, high quality and regularly updated, but it was not always easy to judge how these criteria were met from the information available. It was also often difficult to assess how accessible data were and if they were free-of-charge. Indeed, even freely accessible data are not always easy to use. Therefore, we note that some data sources in the inventory may still prove challenging for monitoring purposes when investigated in more detail.

What is not in the database?
Regional and other sub-global level data sources, such as national data sources, are excluded, but we plan to add those at a later date. Also, any data sources that did not have any identified potential use in monitoring were excluded (e.g., those that did not meet the criteria described above; those that catalogue projects to tools).

How many data sources are in the database?
As of August 2023, we include 178 global data sources: 52 data sources for biodiversity state; 52 for biodiversity pressures and threats; 37 for conservation responses; and 37 that cut across multiple indicator types. We also include (in the Word version of the database) 32 types of report that regularly synthesise biodiversity data from diverse sources.

Can I download data from each data source on the list?
We have flagged with a star (*) those data sources where at least some data (or mapping of data) appear to be instantly, freely and openly available. However, the ease of access and usability of the data will vary between sources.

How can global data sources be used for monitoring biodiversity?
The main use of such data sources is to track the status of biodiversity worldwide and to monitor delivery of global-level goals. These can be goals set by the international community (such as the UN Sustainable Development Goals and the post-2020 Global Biodiversity Framework linked to the Convention on Biological Diversity), or those set by international conservation agencies or multilateral businesses. In some cases, data can also be disaggregated and used to monitor biodiversity at smaller scales, such as at regional or national levels.

I know of a data source that is not on the list – can it be included?
We want to keep the database as up to date as possible, so encourage you to send us details of any errors or omissions. Please drop us an email at SpeciesMonitoringSG@gmail.com.

One of the URLs doesn't work – what should I do?
Please let us know by sending an email to SpeciesMonitoringSG@gmail.com so we can correct it.

Where can I find out more about the database and how it was compiled?
The audit of data sources that led to the creation of the database is described in an openally accessible scientific paper in the journal PLoS ONE: Stephenson, P.J. & Stengel, C. 2020. An inventory of biodiversity data sources for conservation monitoring. *PLoS ONE,* 15(12): e0242923. https://doi.org/10.1371/journal.pone.0242923.

If you have any further queries, please don't hesitate to contact us at SpeciesMonitoringSG@gmail.com.