

Conservation News

Database update shows biodiversity data sources are proliferating

In September 2025, the Species Monitoring Specialist Group of the IUCN Species Survival Commission launched version 4.0 of its Database of Global Data Sources for Biodiversity Conservation Monitoring (speciesmonitoring.org/data-sources.html). The database arose from an audit of biodiversity data sources (Stephenson & Stengel, 2020, *PLOS One*, 15, e0242923) that found 145 databases and data platforms judged to have had potential relevance for monitoring at the global level, had included at least some time-series data, and had been updated recently. The objective of maintaining and updating the database is to help actors involved in biodiversity conservation, from governments to civil society organizations to businesses, identify potential data sources that could supplement the primary data they collect in their own monitoring systems.

Although some data sources have been archived or closed down since 2020, others have emerged, and the total number of identified sources that meet the selection criteria is now 202. We also updated the list of reports published regularly to synthesize global data, which has expanded from 29 to 41.

Many challenges identified in the original audit remain. Some global databases are still difficult to find or access. The landing pages of most websites and portals do not clearly state the target users, the sources of the data available, the length of the time series, what the data can be used for, how it should be used, and by whom. Furthermore, the absence of any global typology of sources makes it hard to categorize, systematically search for and access available data. Many

conservation actors and scientific publishers encourage free and open sharing of data, and 86.6% of the sources listed have some data or data products instantly, freely and openly accessible. However, this figure is similar to the 86.9% found in the original audit, suggesting the limitations to data sharing are not being resolved as quickly as necessary.

Recent research by specialist group members (e.g. Stephenson & Walls, 2022, *Amplify*, 35, 6–14; Mansourian & Stephenson, 2023, *Current Landscape Ecology Reports*, 84, 159–170; Kim et al., 2025, *Proceedings of the Royal Society B*, 292, 20250990) shows that many users of biodiversity data, especially companies and financial institutions, are confused by the overwhelming choice of indicators and data sources and therefore unclear on which to use. The updated database of data sources helps point people in the right direction by categorizing potential data uses for indicators on states, pressures and responses. However, until more managers clarify the aims and uses of their databases and platforms, and adopt functionalities driven by the needs of defined users, the continued proliferation of biodiversity data sources risks adding to confusion rather than improving conservation monitoring.

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