

## **GBIF - mobilising global biodiversity data**

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Research into the world's biodiversity has progressed through dispersed global effort over the last few centuries, centred on natural history collections. Approximately 2 million species have been described by researchers over this period and the science has depended heavily on a massive printed literature, much of which remains in use many decades after its production. However the knowledge held in these non-digital resources is not easily accessed in an efficient way to address modern questions regarding the complexity of biological systems or applied use in areas such as species conservation, land use, agricultural sustainability and human health. Consequently many institutions and countries have made significant investments to transform this historical information into digital formats and to combine it with contemporary measurements and observations. The Global Biodiversity Information Facility is an inter-governmental initiative established to support this process and to deliver globally integrated access to biodiversity data. This effort has evolved over the last decade and now focusses on a combination of low-complexity data publishing tools and centralised data harvesting and aggregation processes. Critical factors requiring continued attention include adoption of stable and persistent data repositories for primary data; consistent use of persistent identifiers for data sets and data elements; use of machine-readable licences to maximise reuse of data; improved processes for crediting data publishers; and development of acceptable processes for community curation of data. These are challenges that are shared by all research domains as they embrace digital data management. Consequently we need to work together to build consensus and common practices to support all research data.