

Call for a systematic review

SIX-MONTH FIXED TERM ASSIGNMENT TO CARRY OUT A SYSTEMATIC REVIEW OF RESEARCH USING GBIF MEDIATED DATA

Summary

The GBIF Secretariat seeks applications to carry out a systematic review of scientific literature using GBIF mediated data in years 2016–2019. This will involve: 1) developing, refining and, in consultation with the GBIF Secretariat and GBIF Science Committee, agreeing on the optimal methodology and research questions for the systematic review 2) on this basis, carrying out the review of approximately 2500-3000 titles published since GBIF introduced DOIs for data citation, and 3) as a first author, to prepare a report in the form of a submission-ready manuscript of the review paper.

Background

GBIF—the Global Biodiversity Information Facility—is an international network and research infrastructure funded by the world’s governments and aimed at providing anyone, anywhere open access to data about all types of life on Earth. Coordinated through its Secretariat in Copenhagen, the GBIF network of participating countries and organizations, working through participant nodes, provides data-holding institutions around the world with common standards and open-source tools that enable them to share information about where and when species have been recorded. GBIF has aggregated over 1.3 billion occurrence records from our network; however, the data is not evenly distributed across the globe.

Use of GBIF-mediated data in research is taking place at the rate of ca. 2 peer-reviewed papers a day. GBIF Secretariat, through literature tracking, has built a bibliographic database of GBIF-using literature, and prepares annual GBIF Science Reviews, highlighting individual publications in the main themes where GBIF plays a role in the data foundation. The Science Reviews include basic analytics of yearly literature collections, and there are opportunities for deeper analyses of these studies at various levels including advanced bibliometrics for better understanding geography, demography, open access, journal and other spectra, as well as deeper systematic review of methods applied to the GBIF mediated data, data quality practices, use of analytical tools, and data combinations.

The study

To direct user-oriented development of the GBIF network and its tools, the GBIF Secretariat would like to understand the patterns and trends of the scientific data use in the recent research literature, and also to identify opportunities for growth and development of data use, to analyse existing shortcomings identified in the literature, and to summarize opportunities for diversification of the data use portfolio of GBIF in research, and to highlight promising directions for overall growth of usefulness for the GBIF users.

GBIF requests that the study develops and applies rigid systematic review methodology to carry out **analyses** to understand the data use space that GBIF supports, and how this space relates to the priorities of potential users. In addition, the review should look into research areas and relevant individual high-profile studies that have not cited use of GBIF-mediated data, including cases where GBIF was used indirectly, cases where alternative sources were used, and cases where use of GBIF was rejected or not considered. This study should also include an analytical **assessment** of the current strengths and weaknesses to determine how best to position GBIF strategically to current and potential research users, and how GBIF data products could be improved or extended to increase our

overall relevance. A key deliverable will be a systematic review analysis developed with GBIF to engage users and to support strategic development of GBIF.

The ideal contractor would have:

- Understanding of the role and mission of GBIF, and its research users
- Personal experience of using GBIF mediated data
- Proven record of bibliographic, text mining, review work
- Familiarity with biodiversity informatics landscape
- Experience of writing and publishing research and review papers
- Ability to understand, interpret, and analyze research carried out by others
- Understand the key analytical methods and approaches in the field

Relevant doctoral degree is an advantage, but not required - this is a postdoc level, strictly time-limited analytical and writing task, which can also be suitable for a sabbatical.

More information on the GBIF using literature can be found at:

- GBIF using literature from 2016-present
https://www.gbif.org/resource/search?contentType=literature&year=2016,2019&relevance=GBIF_USED
- GBIF Science Review 2019 <https://www.gbif.org/science-review>

Deadline for proposal submission: 1 December 2019

Expected start of contract: 1 January - 1 February 2019

Duration of the contract: 6 months

Delivery of first draft: 15 May 2020

Delivery of final draft: by the end of contract, June 2020

LOCATION

The selected candidate may choose to carry out the work at their home base, or it may be possible to offer working facilities alongside the GBIF Secretariat in Copenhagen.

FEE

The contract is paid by a fee of €20,000 from the GBIF Secretariat in six monthly instalments to cover all costs of the contractor.

Your application

Please include the following in your application:

1. A summary of the approach you will take to the work, including a potential outline for the report (no more than two pages inclusive of possible schemas)
2. A full CV or similar, including list of publications
3. Examples and other means of demonstration of your fit to the task where you led or actively participated in the past five years that are relevant to this proposal.

Please send your proposal to info@gbif.org.

If you have any questions relating to the specifications for this contract, please contact Dmitry Schigel (dschigel@gbif.org).