Versioned Archive and Review of Biotic Interactions and Taxon Names Found within globalbioticinteractions/brtc-para hash://md5/87b53ca565c231e4917d1dccc4c707ec

by Nomer, Elton and Preston, three naive review bots review@globalbioticinteractions.org https://globalbioticinteractions.org/contribute https://github.com/globalbioticinteractions/brtc-para/issues

2025-12-01

Abstract

Life on Earth is sustained by complex interactions between organisms and their environment. These biotic interactions can be captured in datasets and published digitally. We present a review and archiving process for such an openly accessible digital interactions dataset of known origin and discuss its outcome. The dataset under review, named globalbioticinteractions/brtc-para, has fingerprint hash://md5/87b53ca565c231e4917d1dccc4c707ec, is 15.9MiB in size and contains 1 interaction with 1 unique type of association (e.g., interactsWith) between 1 primary taxon (e.g., Risor ruber) and 1 associated taxon (e.g., a large barrel sponge (probably Xestospongia muta) by Steve Gittings, FGB Nat. Mar. Sanctuary Manager)). This report includes detailed summaries of interaction data, a taxonomic review from multiple catalogs, and an archived version of the dataset from which the reviews are derived.

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Introduction

Data Review and Archive

Data review and archiving can be a time-consuming process, especially when done manually. This review report aims to help facilitate both activities. It automates the archiving of datasets, including Darwin Core archives, and is a citable backup of a version of the dataset. Additionally, an automatic review of species interaction claims made in the dataset is generated and registered with Global Biotic Interactions (J. H. Poelen, Simons, and Mungall 2014).

This review includes summary statistics about, and observations about, the dataset under review :

Biodiversity Research and Teaching Collections - TCWC Vertebrates - Version 9.4 http://ipt.vertnet.org: $8080/ipt/archive.do?r=tcwc_verts$ 2025-11-29T00:27:25.655Z hash://md5/87b53ca565c231e4917d1dccc4c707ec

For additional metadata related to this dataset, please visit https://github.com/globalbioticinteractions/brtc-para and inspect associated metadata files including, but not limited to, README.md, eml.xml, and/or globi.json.

Methods

The review is performed through programmatic scripts that leverage tools like Preston (Elliott et al. 2025), Elton (Kuhn, Poelen, and Leinweber 2025), Nomer (Salim and Poelen 2025), globinizer (J. Poelen, Seltmann, and Mietchen 2024) combined with third-party tools like grep, mlr, tail and head.

Table 1: Tools used in this review process

tool name	version	
preston	0.11.1	
elton	0.15.13	
nomer	0.5.17	
globinizer	0.4.0	
mlr	6.0.0	
jq	1.6	
yq	4.25.3	
pandoc	3.1.6.1	
duckdb	1.3.1	

The review process can be described in the form of the script below ¹.

- # get versioned copy of the dataset (size approx. 15.9MiB) under review elton pull globalbioticinteractions/brtc-para
- # export indexed interaction records
 elton interactions globalbioticinteractions/brtc-para\
 interactions.tsv
- # export names and align them with the Catalogue of Life using Nomer elton names globalbioticinteractions/brtc-para\
- | nomer append col\
- > name-alignment.tsv

or visually, in a process diagram.

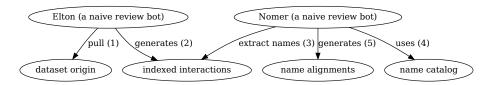


Figure 1: Review Process Overview

¹Note that you have to first get the data (e.g., via elton pull globalbiotic interactions/brtc-para) before being able to generate reviews (e.g., elton review globalbiotic interactions/brtc-para), extract interaction claims (e.g., elton interactions globalbiotic interactions/brtc-para), or list taxonomic names (e.g., elton names globalbiotic interactions/brtc-para)

You can find a copy of the full review script at check-data.sh. See also GitHub and Codeberg.

Results

In the following sections, the results of the review are summarized 2 . Then, links to the detailed review reports are provided.

 $\label{eq:Files} \textbf{Files}$ The following files are produced in this review:

filename	description
biblio.bib	list of bibliographic reference of this
	review
check-dataset.sh	data review workflow/process as
	expressed in a bash script
data.zip	a versioned archive of the data under review
HEAD	the digital signature of the data
111111111111111111111111111111111111111	under review
index.docx	review in MS Word format
index.html	review in HTML format
index.md	review in Pandoc markdown format
index.pdf	review in PDF format
indexed-citations.csv.gz	list of distinct reference citations for
Ţ.	reviewed species interaction claims in
	gzipped comma-separated values file
	format
indexed-citations.html.gz	list of distinct reference citations for
	reviewed species interactions claims
	in gzipped html file format
indexed-citations.tsv.gz	list of distinct reference citations for
	reviewed species interaction claims in
	gzipped tab-separated values format
indexed-interactions-col-family-col-	network diagram showing the taxon
family.svg	family to taxon family interaction
	claims in the dataset under review as
	interpreted by the Catalogue of Life
	via Nomer Corpus of Taxonomic
	Resources (J. H. (ed.). Poelen 2024)

²Disclaimer: The results in this review should be considered friendly, yet naive, notes from an unsophisticated robot. Please keep that in mind when considering the review results.

filename	description
indexed-interactions-col-kingdom-col-kingdom.svg	network diagram showing the taxon kingdom to taxon kingom interaction claims in the dataset under review as interpreted by the Catalogue of Life via Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024)
indexed-interactions.csv.gz	species interaction claims indexed from the dataset under review in gzipped comma-separated values format
indexed-interactions.html.gz	species interaction claims indexed from the dataset under review in gzipped html format
indexed-interactions.tsv.gz	species interaction claims indexed from the dataset under review in gzipped tab-separated values format
$indexed \hbox{-} interactions. parquet$	species interaction claims indexed from the dataset under review in Apache Parquet format
indexed-interactions-sample.csv	list of species interaction claims indexed from the dataset under review in gzipped comma-separated values format
indexed-interactions-sample.html	first 500 species interaction claims indexed from the dataset under review in html format
indexed-interactions-sample.tsv	first 500 species interaction claims indexed from the dataset under review in tab-separated values format
indexed-names.csv.gz	taxonomic names indexed from the dataset under review in gzipped comma-separated values format
indexed-names.html.gz	taxonomic names found in the dataset under review in gzipped html format
indexed-names.tsv.gz	taxonomic names found in the dataset under review in gzipped tab-separated values format
indexed-names.parquet	taxonomic names found in the dataset under review in Apache Parquet format

filename	description
indexed-names-resolved-col.csv.gz	taxonomic names found in the dataset under review aligned with the Catalogue of Life as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped comma-separated values format
indexed-names-resolved-col.html. gz	taxonomic names found in the dataset under review aligned with the Catalogue of Life as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped html format
indexed-names-resolved-col.tsv.gz	taxonomic names found in the dataset under review aligned with the Catalogue of Life as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped tab-separated values format
indexed-names-resolved-col.parquet	taxonomic names found in the dataset under review aligned with the Catalogue of Life as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in Apache Parquet format
indexed-names-resolved-discoverlife.csv.gz	taxonomic names found in the dataset under review aligned with Discover Life bee species checklist as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped comma-separated values format
$indexed-names-resolved-\\ discoverlife.html.gz$	taxonomic names found in the dataset under review aligned with Discover Life bee species checklist as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped html format

filename	description
$indexed-names-resolved-\\ discoverlife.tsv.gz$	taxonomic names found in the dataset under review aligned with Discover Life bee species checklist as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped tab-separated values format
indexed-names-resolved-discoverlife.parquet	taxonomic names found in the dataset under review aligned with Discover Life bee species checklist as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in Apache Parquet format
indexed-names-resolved-gbif.csv.gz	taxonomic names found in the dataset under review aligned with GBIF Backbone Taxonomy as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped
indexed-names-resolved-gbif.html.gz	comma-separated values format taxonomic names found in the dataset under review aligned with GBIF Backbone Taxonomy as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped html format
indexed-names-resolved-gbif.tsv.gz	taxonomic names found in the dataset under review aligned with GBIF Backbone Taxonomy as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped tab-separated values format
indexed-names-resolved-gbif. parquet	taxonomic names found in the dataset under review aligned with GBIF Backbone Taxonomy as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in Apache Parquet format

filename	description
indexed-names-resolved-itis.csv.gz	taxonomic names found in the dataset under review aligned with Integrated Taxonomic Information System (ITIS) as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped comma-separated values format
indexed-names-resolved-it is.html.gz	taxonomic names found in the dataset under review aligned with Integrated Taxonomic Information System (ITIS) as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped html format
indexed-names-resolved-it is.tsv.gz	taxonomic names found in the dataset under review aligned with Integrated Taxonomic Information System (ITIS) as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped tab-separated values format
indexed-names-resolved-it is. parquet	taxonomic names found in the dataset under review aligned with Integrated Taxonomic Information System (ITIS) as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in Apache Parquet format
indexed-names-resolved-mdd.csv.gz	taxonomic names found in the dataset under review aligned with the Mammal Diversity Database as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped comma-separated values format
indexed-names-resolved-mdd.html.gz	taxonomic names found in the dataset under review aligned with Mammal Diversity Database as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped html format

filename	description
indexed-names-resolved-mdd.tsv.gz	taxonomic names found in the dataset under review aligned with Mammal Diversity Database as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped tab-separated values format
indexed-names-resolved-mdd. parquet	taxonomic names found in the dataset under review aligned with Mammal Diversity Database as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in Apache Parquet format
indexed-names-resolved-ncbi.csv.gz	taxonomic names found in the dataset under review aligned with the NCBI Taxonomy as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped comma-separated values format
indexed-names-resolved-ncbi.html.gz	taxonomic names found in the dataset under review aligned with the NCBI Taxonomy as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped html format
indexed-names-resolved-ncbi.tsv.gz	taxonomic names found in the dataset under review aligned with the NCBI Taxonomy as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped tab-separated values format
indexed-names-resolved-ncbi. parquet	taxonomic names found in the dataset under review aligned with the NCBI Taxonomy as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in Apache Parquet format

filename	description
indexed-names-resolved-pbdb.csv.gz	taxonomic names found in the dataset under review aligned with the Paleobiology Database as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped comma-separated values format
indexed-names-resolved-pbdb.html.gz	taxonomic names found in the dataset under review aligned with Paleobiology Database as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped html format
indexed-names-resolved-pbdb.tsv.gz	taxonomic names found in the dataset under review aligned with Paleobiology Database as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped tab-separated values format
indexed-names-resolved-pbdb. parquet	taxonomic names found in the dataset under review aligned with Paleobiology Database as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in Apache Parquet format
indexed-names-resolved-tpt.csv.gz	taxonomic names found in the dataset under review aligned with the Terrestrial Parasite Tracker (TPT) Taxonomic Resource as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped comma-separated values format
indexed-names-resolved-tpt.html.gz	taxonomic names found in the dataset under review aligned with the Terrestrial Parasite Tracker (TPT) Taxonomic Resource as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped html format

filename	description
indexed-names-resolved-tpt.tsv.gz	taxonomic names found in the dataset under review aligned with the Terrestrial Parasite Tracker (TPT) Taxonomic Resource as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped tab-separated values format
indexed-names-resolved-tpt.parquet	taxonomic names found in the dataset under review aligned with the Terrestrial Parasite Tracker (TPT) Taxonomic Resource as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in Apache Parquet format
indexed-names-resolved-w fo.csv.gz	taxonomic names found in the dataset under review aligned with the World of Flora Online as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped
indexed-names-resolved-w fo.html.gz	comma-separated values format taxonomic names found in the dataset under review aligned with the World of Flora Online as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.).
indexed-names-resolved-w fo.tsv.gz	Poelen 2024) in gzipped html format taxonomic names found in the dataset under review aligned with the World of Flora Online as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped tab-separated values format
indexed-names-resolved-w fo. parquet	taxonomic names found in the dataset under review aligned with the World of Flora Online as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in Apache Parquet format

filename	description
indexed-names-resolved-worms.csv.gz	taxonomic names found in the dataset under review aligned with the World Register of Marine Species (WoRMS) as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped comma-separated values format
$indexed-names-resolved-\\worms.html.gz$	taxonomic names found in the dataset under review aligned with the World Register of Marine Species (WoRMS) as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped html format
indexed-names-resolved-worms.tsv.gz	taxonomic names found in the dataset under review aligned with the World Register of Marine Species (WoRMS) as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024) in gzipped
indexed-names-resolved-worms.parquet	tab-separated values format taxonomic names found in the dataset under review aligned with the World Register of Marine Species (WoRMS) as accessed through the Nomer Corpus of Taxonomic Resources (J. H. (ed.). Poelen 2024)
indexed-names-sample.csv	in Apache Parquet format first 500 taxonomic names found in the dataset under review in comma-separated values format
indexed-names-sample.html	first 500 taxonomic names found in the dataset under review in html format
indexed-names-sample.ts v	first 500 taxonomic names found in the dataset under review in tab-separated values format
interaction.svg	diagram summarizing the data model used to index species interaction claims
nanopub-sample.trig	first 500 species interaction claims as expressed in the nanopub format (Kuhn and Dumontier 2014)

filename	description
nanopub.trig.gz	species interaction claims as
	expressed in the nanopub format
	(Kuhn and Dumontier 2014)
process.svg	diagram summarizing the data review
	processing workflow
prov.nq	origin of the dataset under review as
	expressed in rdf/nquads
review.csv.gz	review notes associated with the
	dataset under review in gzipped
	comma-separated values format
review.html.gz	review notes associated with the
	dataset under review in gzipped html
	format
review.tsv.gz	review notes associated with the
	dataset under review in gzipped
	tab-separated values format
review-sample.csv	first 500 review notes associated with
	the dataset under review in
	comma-separated values format
review-sample.html	first 500 review notes associated with
-	the dataset under review in html
	format
review-sample.tsv	first 500 review notes associated with
-	the dataset under review in
	tab-separated values format
review.svg	a review badge generated as part of
O .	the dataset review process
zenodo.json	metadata of this review expressed in
- · · · · J~ · · ·	Zenodo record metadata

Archived Dataset

Note that data.zip file in this archive contains the complete, unmodified archived dataset under review.

Biotic Interactions

In this review, biotic interactions (or biotic associations) are modeled as a primary (aka subject, source) organism interacting with an associate (aka object, target) organism. The dataset under review classified the primary/associate organisms with specific taxa. The primary and associate organisms The kind of interaction is documented as an interaction type.

The dataset under review, named global bioticinteractions/brtc-para, has finger- $\ensuremath{\mathsf{I}}$

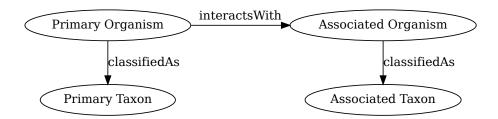


Figure 2: Biotic Interaction Data Model

print hash://md5/87b53ca565c231e4917d1dccc4c707ec, is 15.9MiB in size and contains 1 interaction with 1 unique type of association (e.g., interactsWith) between 1 primary taxon (e.g., Risor ruber) and 1 associated taxon (e.g., a large barrel sponge (probably Xestospongia muta) by Steve Gittings, FGB Nat. Mar. Sanctuary Manager)).

An exhaustive list of indexed interaction claims can be found in gzipped csv, tsv and parquet archives. To facilitate discovery, a preview of claims available in the gzipped html page at indexed-interactions.html.gz are shown below.

The exhaustive list was used to create the following data summaries below.

Table 3: Sample of Indexed Interaction Claims

sourceTaxonName	interactionTypeN	amtargetTaxonName	referenceCitation
Risor ruber	interactsWith	a large barrel sponge (probably Xestospongia muta) by Steve Gittings, FGB Nat. Mar. Sanctuary Manager)	http://portal.vertnet.org/o/tcwc/ichthyology?icatalog-tcwc-ichthyology- 10587-01

Table 4: Most Frequently Mentioned Interaction Types (up to 20 most frequent)

$\overline{\text{interactionTypeName}}$	count
interactsWith	1

Table 5: Most Frequently Mentioned Primary Taxa (up to 20 most frequent)

sourceTaxonName	count
Risor ruber	1

Table 6: Most Frequently Mentioned Associate Taxa (up to 20 most frequent)

targetTaxonName	count
a large barrel sponge (probably Xestospongia muta) by Steve Gittings, FGB Nat. Mar. Sanctuary Manager)	1

Table 7: Most Frequent Interactions between Primary and Associate Taxa (up to 20 most frequent)

source Taxon Name	interaction Type Namt arget Taxon Name		count
Risor ruber	interactsWith	a large barrel sponge (probably Xestospongia muta) by Steve Gittings, FGB Nat. Mar. Sanctuary Manager)	1

Interaction Networks

The figures below provide a graph view on the dataset under review. The first shows a summary network on the kingdom level, and the second shows how interactions on the family level. It is important to note that both network graphs were first aligned taxonomically using the Catalogue of Life. Please refer to the original (or verbatim) taxonomic names for a more original view on the interaction data.

Figure 3: Interactions on taxonomic kingdom rank as interpreted by the Catalogue of Life download svg

Figure 4: Interactions on the taxonomic family rank as interpreted by the Catalogue of Life. download svg

You can download the indexed dataset under review at indexed-interactions.c sv.gz. A tab-separated file can be found at indexed-interactions.tsv.gz

Learn more about the structure of this download at GloBI website, by opening a GitHub issue, or by sending an email.

Another way to discover the dataset under review is by searching for it on the GloBI website.

Taxonomic Alignment

As part of the review, all names are aligned against various name catalogs (e.g., col, ncbi, discoverlife, gbif, itis, wfo, mdd, tpt, pbdb, and worms). These alignments can help review name usage or aid in selecting of a suitable taxonomic name resource.

Table 8: Sample of Name Alignments

providedName	relationName	resolvedCatalogNar	mæsolvedName
Barrel sponge probably muta by	NONE	col	Barrel sponge probably muta by
Risor ruber Barrel sponge probably muta by	HAS_ACCEPTED NONE	O_cNAME discoverlife	Risor ruber Barrel sponge probably muta by
Risor ruber	NONE	discoverlife	Risor ruber

Table 9: Distribution of Taxonomic Ranks of Aligned Names by Catalog. Names that were not aligned with a catalog are counted as NAs. So, the total number of unaligned names for a catalog will be listed in their NA row.

$\overline{\rm resolved Catalog Name}$	${\it resolved} {\it Rank}$	count
col	NA	1
col	species	1
discoverlife	NA	2
gbif	NA	1
gbif	species	1

$\overline{\rm resolvedCatalogName}$	${\it resolved} {\it Rank}$	count
itis	NA	1
itis	species	1
mdd	NA	2
ncbi	NA	1
ncbi	species	1
pbdb	NA	2
tpt	NA	2
wfo	NA	2
worms	NA	1
worms	species	1

Table 10: Name relationship types per catalog. Name relationship type "NONE" means that a name was not recognized by the associated catalog. "SAME_AS" indicates either a "HAS_ACCEPTED_NAME" or "SYNONYM_OF" name relationship type. We recognize that "SYNONYM_OF" encompasses many types of nomenclatural synonymies (ICZN 1999) (e.g., junior synonym, senior synonyms).

${\it resolved Catalog Name}$	${\rm relationName}$	count
col	NONE	1
col	HAS_ACCEPTED_NAME	1
discoverlife	NONE	2
gbif	NONE	1
gbif	HAS_ACCEPTED_NAME	1
itis	NONE	1
itis	HAS_ACCEPTED_NAME	1
mdd	NONE	2
ncbi	NONE	1
ncbi	$SAME_AS$	1
pbdb	NONE	2
tpt	NONE	2
wfo	NONE	2
worms	NONE	1
worms	HAS_ACCEPTED_NAME	1

Table 11: List of Available Name Alignment Reports

catalog name	alignment results
col	associated names alignments report in gzipped html, csv, and tsv)
ncbi	associated names alignments report in gzipped html, csv, and tsv)
discoverlife	associated names alignments report in gzipped html, csv, and tsv)
gbif	associated names alignments report in gzipped html, csv, and tsv)
itis	associated names alignments report in gzipped html, csv, and tsv)
wfo	associated names alignments report in gzipped html, csv, and tsv)
mdd	associated names alignments report in gzipped html, csv, and tsv)
tpt	associated names alignments report in gzipped html, csv, and tsv)
pbdb	associated names alignments report in gzipped html, csv, and tsv)
worms	associated names alignments report in gzipped html, csv, and tsv)

Additional Reviews

Elton, Nomer, and other tools may have difficulties interpreting existing species interaction datasets. Or, they may misbehave, or otherwise show unexpected behavior. As part of the review process, detailed review notes are kept that document possibly misbehaving, or confused, review bots. An sample of review notes associated with this review can be found below.

Table 12: First few lines in the review notes.

reviewDate	${\bf review Comment Type}$	reviewComment
2025-12-01T18:38:38Z	summary	https://github.com/globalbioticinteractions/brtc-para/archive/f0a718145b05ed484c4d88947ff712d5f63954
2025-12-01T18:38:38Z	summary	1 interaction(s)
2025-12-01T18:38:38Z 2025-12-01T18:38:38Z	summary summary	0 note(s) 4 info(s)

In addition, you can find the most frequently occurring notes in the table below.

: Most frequently occurring review notes, if any.

For additional information on review notes, please have a look at the first 500 Review Notes in html format or the download full gzipped csv or tsv archives.

GloBI Review Badge

As part of the review, a review badge is generated. This review badge can be included in webpages to indicate the review status of the dataset under review.



Figure 5: Picture of a GloBI Review Badge 3

Note that if the badge is green, no review notes were generated. If the badge is yellow, the review bots may need some help with interpreting the species interaction data.

GloBI Index Badge

If the dataset under review has been registered with GloBI, and has been successfully indexed by GloBI, the GloBI Index Status Badge will turn green. This means that the dataset under review was indexed by GloBI and is available through GloBI services and derived data products.



Figure 6: Picture of a GloBI Index Badge ⁴

If you'd like to keep track of reviews or index status of the dataset under review, please visit GloBI's dataset index 5 for badge examples.

Discussion

This review and archive provides a means of creating citable versions of datasets that change frequently. This may be useful for dataset managers, including natural history collection data managers, as a backup archive of a shared Darwin Core archive. It also serves as a means of creating a trackable citation for the dataset in an automated way, while also including some information about the contents of the dataset.

This review aims to provide a perspective on the dataset to aid in understanding of species interaction claims discovered. However, it is important to note that

 $^{^3\}mathrm{Up}\text{-to-date}$ status of the GloBI Review Badge can be retrieved from the GloBI Review Depot

⁴Up-to-date status of the GloBI Index Badge can be retrieved from GloBI's API

 $^{^5\}mathrm{At}$ time of writing (2025-12-01) the version of the GloBI dataset index was available at https://globalbioticinteractions.org/datasets

this review does *not* assess the quality of the dataset. Instead, it serves as an indication of the open-ness⁶ and FAIRness (Wilkinson et al. 2016; Trekels et al. 2023) of the dataset: to perform this review, the data was likely openly available, Findable, Accessible, Interoperable and Reusable. The current Open-FAIR assessment is qualitative, and a more quantitative approach can be implemented with specified measurement units.

This report also showcases the reuse of machine-actionable (meta)data, something highly recommended by the FAIR Data Principles (Wilkinson et al. 2016). Making (meta)data machine-actionable enables more precise procesing by computers, enabling even naive review bots like Nomer and Elton to interpret the data effectively. This capability is crucial for not just automating the generation of reports, but also for facilitating seamless data exchanges, promoting interoperability.

Acknowledgements

We thank the many humans that created us and those who created and maintained the data, software and other intellectual resources that were used for producing this review. In addition, we are grateful for the natural resources providing the basis for these human and bot activities. Also, thanks to https://github.com/zygoballus for helping improve the layout of the review tables.

Author contributions

Nomer was responsible for name alignments. Elton carried out dataset extraction, and generated the review notes. Preston tracked, versioned, and packaged, the dataset under review.

References

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 $^{^6}$ According to http://opendefinition.org/: "Open data is data that can be freely used, reused and redistributed by anyone - subject only, at most, to the requirement to attribute and sharealike."

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