

Versioned Archive and Review of Biotic
Interactions and Taxon Names Found within
globalbioticinteractions/strona
hash://md5/619bf533ada2172a1a8cb63a5e1ce1cd

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<https://github.com/globalbioticinteractions/strona/issues>

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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/strona, has fingerprint hash://md5/619bf533ada2172a1a8cb63a5e1ce1cd, is 6.32MiB in size and contains 38,008 interactions with 1 unique type of association (e.g., parasiteOf) between 11,802 primary taxa (e.g., *Anisakis simplex*) and 4,650 associated taxa (e.g., *Cyprinus carpio carpio*). This report includes detailed summaries of interaction data, a taxonomic review from multiple catalogs, and an archived version of the dataset from which the reviews are derived.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 :

Strona, G., Palomares, M. L. D., Bailly, N., Galli, P., & Lafferty, K. D. (2013). Host range, host ecology, and distribution of more than 11800 fish parasite species. *Ecology*, 94(2), 544–544. doi:10.1890/12-1419.1 <https://github.com/globalbioticinteractions/strona/archive/5b9f1fb08966d2f295b341509b87650022025-08-30T04:25:24.428Z> hash://md5/619bf533ada2172a1a8cb63a5e1ce1cd

For additional metadata related to this dataset, please visit <https://github.com/globalbioticinteractions/strona> 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	0.10.1
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. 6.32MiB) under review
elton pull globalbioticinteractions/strona

# generate review notes
elton review globalbioticinteractions/strona\
> review.tsv

# export indexed interaction records
elton interactions globalbioticinteractions/strona\
> interactions.tsv

# export names and align them with the Catalogue of Life using Nomer
elton names globalbioticinteractions/strona\
| nomer append col\
> name-alignment.tsv
```

or visually, in a process diagram.

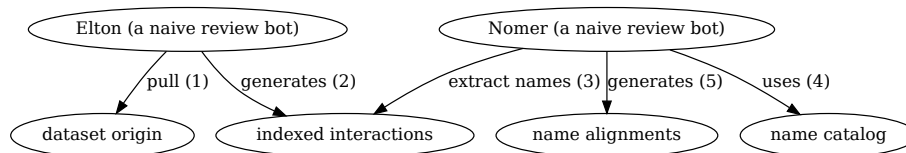


Figure 1: Review Process Overview

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

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.

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 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 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-family.svg	network diagram showing the taxon 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 kingdom interaction claims in the dataset under review as interpreted by the Catalogue of Life via Nomen 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-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 comma-separated values format
indexed-names-resolved-gbif.html.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 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-itis.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-itis.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-itis.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-wfo.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 comma-separated values format
indexed-names-resolved-wfo.html.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 html format
indexed-names-resolved-wfo.tsv.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 tab-separated values format
indexed-names-resolved-wfo.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 tab-separated values format
indexed-names-resolved-worms.parquet	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 Apache Parquet format
indexed-names-sample.csv	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.tsv	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 the dataset review process
zenodo.json	metadata of this review expressed in 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 `globalbioticinteractions/strona`, has finger-

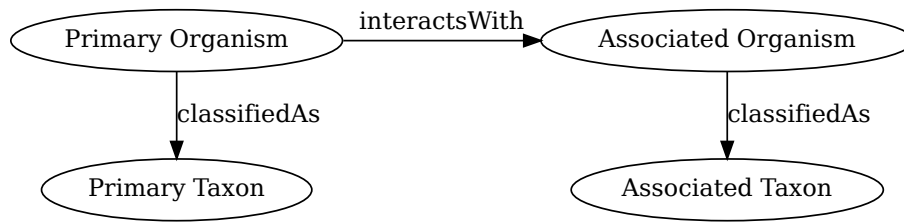


Figure 2: Biotic Interaction Data Model

print hash://md5/619bf533ada2172a1a8cb63a5e1ce1cd, is 6.32MiB in size and contains 38,008 interactions with 1 unique type of association (e.g., parasiteOf) between 11,802 primary taxa (e.g., *Anisakis simplex*) and 4,650 associated taxa (e.g., *Cyprinus carpio carpio*).

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	interactionType	targetTaxonName	referenceCitation
Acanthocephaloides distinctus	parasiteOf	Prognathodes marcellae	Giovanni Strona, Maria Lourdes D. Palomares, Nicolas Bailly, Paolo Galli, and Kevin D. Lafferty. 2013. Host range, host ecology, and distribution of more than 11800 fish parasite species. Ecology 94:544. https://doi.org/10.1890/12-1419.1

sourceTaxonName	interactionType	targetTaxonName	referenceCitation
Acanthocephaloides distinctus	parasiteOf	Coris julis	Giovanni Strona, Maria Lourdes D. Palomares, Nicolas Bailly, Paolo Galli, and Kevin D. Lafferty. 2013. Host range, host ecology, and distribution of more than 11800 fish parasite species. Ecology 94:544. https://doi.org/10.1890/12-1419.1
Acanthocephaloides distinctus	parasiteOf	Microchirus wittei	Giovanni Strona, Maria Lourdes D. Palomares, Nicolas Bailly, Paolo Galli, and Kevin D. Lafferty. 2013. Host range, host ecology, and distribution of more than 11800 fish parasite species. Ecology 94:544. https://doi.org/10.1890/12-1419.1

sourceTaxonName	interactionTypeName	targetTaxonName	referenceCitation
Acanthocephaloides distinctus	parasiteOf	Monochirus hispidus	Giovanni Strona, Maria Lourdes D. Palomares, Nicolas Bailly, Paolo Galli, and Kevin D. Lafferty. 2013. Host range, host ecology, and distribution of more than 11800 fish parasite species. Ecology 94:544. https://doi.org/10.1890/12-1419.1

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

interactionTypeName	count
parasiteOf	38008

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

sourceTaxonName	count
Anisakis simplex	268
Hysterothylacium aduncum	233
Echinorhynchus gadi	232
Scolex pleuronectis	217
Derogenes varicus	203
Posthodiplostomum minimum	200
Bothriocephalus acheilognathi	165
Diplostomum spathaceum	161
Pseudoterranova decipiens	154
Neobenedenia melleni	143
Callitetrarhynchus gracilis	140
Clinostomum complanatum	139
Neoechinorhynchus rutili	124

sourceTaxonName	count
Raphidascaris acus	119
Lecithaster gibbosus	119
Grillotia erinaceus	115
Parahemiurus merus	111
Hepatoxylon trichiuri	105
Brachyphallus crenatus	102

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

targetTaxonName	count
Cyprinus carpio carpio	286
Thunnus albacares	241
Oncorhynchus mykiss	213
Silurus asotus	202
Abramis brama	180
Salmo salar	166
Lota lota	157
Katsuwonus pelamis	155
Squalius cephalus	152
Gasterosteus aculeatus aculeatus	146
Thunnus obesus	144
Carassius auratus auratus	128
Alburnus alburnus	128
Blicca bjoerkna	126
Phoxinus phoxinus	126
Leuciscus idus	125
Scomber scombrus	124
Xiphias gladius	123
Salvelinus fontinalis	118

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

sourceTaxonName	interactionType	targetTaxonName	count
Bothriocephalus acheilognathi	parasiteOf	Cyprinus carpio carpio	7
Dinurus longisinus	parasiteOf	Coryphaena hippurus	7

sourceTaxonName	interactionType	targetTaxonName	count
Microcotyle pomatomi	parasiteOf	Pomatomus saltatrix	6
Koellikeria filicollis	parasiteOf	Brama brama	6
Dasyrhynchus talismani	parasiteOf	Thunnus albacares	5
Tentacularia coryphaenae	parasiteOf	Coryphaena hippurus	5
Tentacularia coryphaenae	parasiteOf	Xiphias gladius	5
Bothriocephalus acheilognathi	parasiteOf	Ctenopharyngodon idella	5
Gotocotyla secunda	parasiteOf	Scomberomorus commerson	5
Cathucotyle cathuaui	parasiteOf	Scomberomorus commerson	5
Neohexostoma euthynni	parasiteOf	Euthynnus alletteratus	5
Dinurus barbatus	parasiteOf	Coryphaena hippurus	5
Dinurus tornatus	parasiteOf	Coryphaena hippurus	5
Elytrophalloides oatesi	parasiteOf	Dissostichus eleginoides	5
Echinorhynchus gadi	parasiteOf	Gadus macrocephalus	4
Echinorhynchus gadi	parasiteOf	Pogonophryne ventrimaculata	4
Echinorhynchus gadi	parasiteOf	Pseudoplesiops knighti	4
Corynosoma strumosum	parasiteOf	Reinhardtius hippoglossoides	4
Diphyllbothrium dendriticum	parasiteOf	Oncorhynchus mykiss	4

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](#)

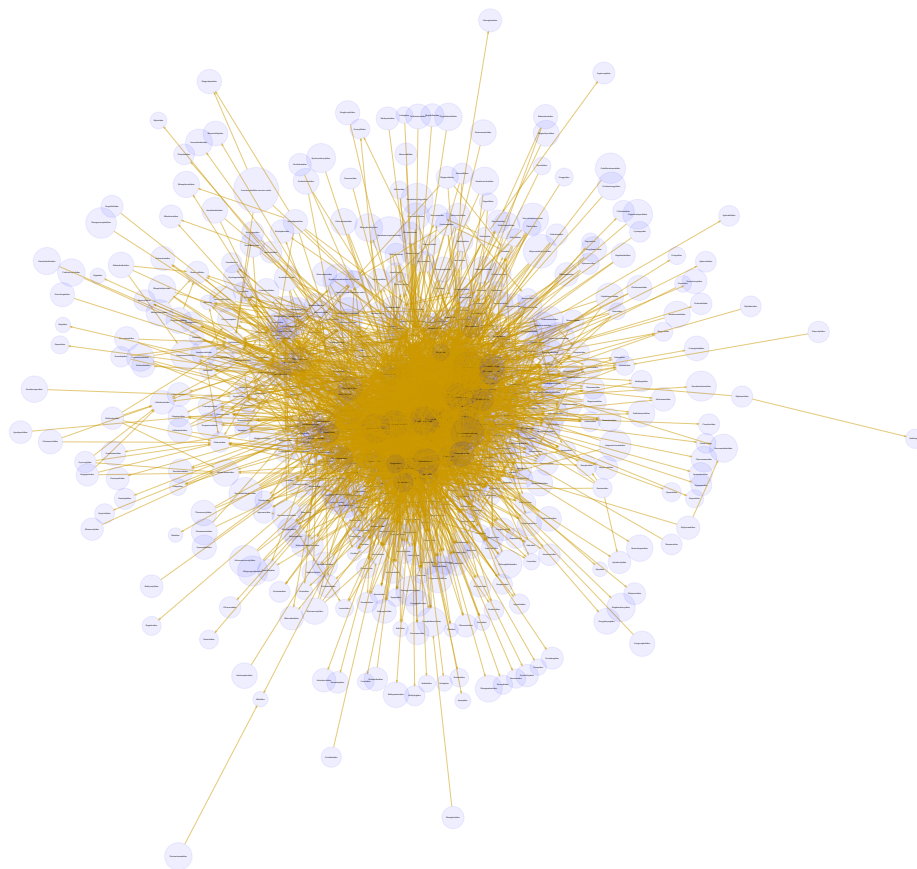


Figure 4: Interactions on the taxonomic family rank as interpreted by the Catalogue of Life. [download svg](#)

You can download the indexed dataset under review at [indexed-interactions.csv.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, pldb, 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	resolvedCatalogName	resolvedName
Abalistes	HAS_ACCEPTED_NAME	col	Abalistes
filamentosus			filamentosus
Abalistes stellaris	HAS_ACCEPTED_NAME	col	Abalistes stellaris
Abbottina	HAS_ACCEPTED_NAME	col	Abbottina
rivularis			rivularis
Aberrapex	HAS_ACCEPTED_NAME	col	Aberrapex
arrhynchum			arrhynchum

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.

resolvedCatalogName	resolvedRank	count
col	NA	2125
col	form	1
col	genus	9
col	infraspecific name	14
col	species	14289
col	subspecies	7
discoverlife	NA	16442
gbif	NA	1587
gbif	form	2
gbif	genus	13
gbif	species	14827
gbif	subspecies	16

resolvedCatalogName	resolvedRank	count
gbif	variety	7
itis	NA	9935
itis	genus	29
itis	order	1
itis	species	6436
itis	subspecies	41
mdd	NA	16442
ncbi	NA	10268
ncbi	genus	7
ncbi	species	6087
ncbi	subspecies	80
pbdb	NA	16159
pbdb	species	279
pbdb	subspecies	4
tpt	NA	16442
wfo	NA	16442
worms	NA	1729
worms	forma	1
worms	genus	12
worms	species	14699
worms	subspecies	4
worms	variety	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).

resolvedCatalogName	relationName	count
col	HAS_ACCEPTED_NAME	11409
col	SYNONYM_OF	3454
col	NONE	2130
discoverlife	NONE	16452
gbif	HAS_ACCEPTED_NAME	11682
gbif	SYNONYM_OF	3556
gbif	NONE	1592
itis	HAS_ACCEPTED_NAME	6190
itis	SYNONYM_OF	348
itis	NONE	9942

resolvedCatalogName	relationName	count
mdd	NONE	16452
ncbi	SAME_AS	5712
ncbi	NONE	10274
ncbi	SYNONYM_OF	466
pbdb	NONE	16169
pbdb	HAS_ACCEPTED_NAME	260
pbdb	SYNONYM_OF	23
tpt	NONE	16452
wfo	NONE	16452
worms	HAS_ACCEPTED_NAME	11272
worms	SYNONYM_OF	3606
worms	NONE	1734

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	reviewCommentType	reviewComment
2025-09-01T05:45:53Z	summary	https://github.com/globalbioticinteractions/strona/archives
2025-09-01T05:45:53Z	summary	38008 interaction(s)
2025-09-01T05:45:53Z	summary	0 note(s)
2025-09-01T05:45:53Z	summary	0 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

³Up-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

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 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, **F**indable, **A**ccessible, **I**nteroperable and **R**eusable. 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 processing 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.

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⁵At time of writing (2025-09-01) the version of the GloBI dataset index was available at <https://globalbioticinteractions.org/datasets>

⁶According 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."

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.

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