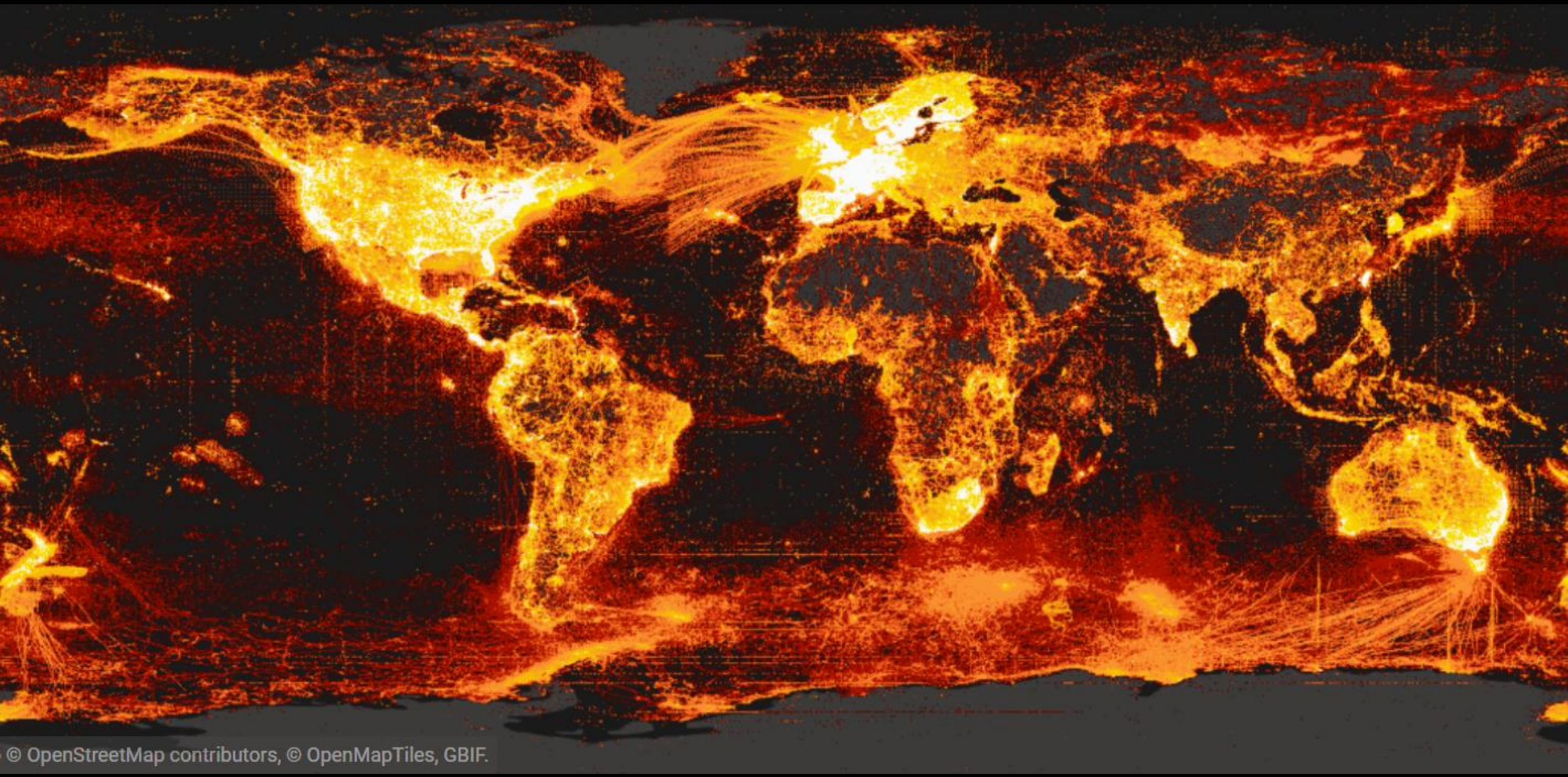

© OpenStreetMap contributors, © OpenMapTiles, GBIF.

Data citation and GBIF powered literature

Dmitry Schigel | Scientific officer

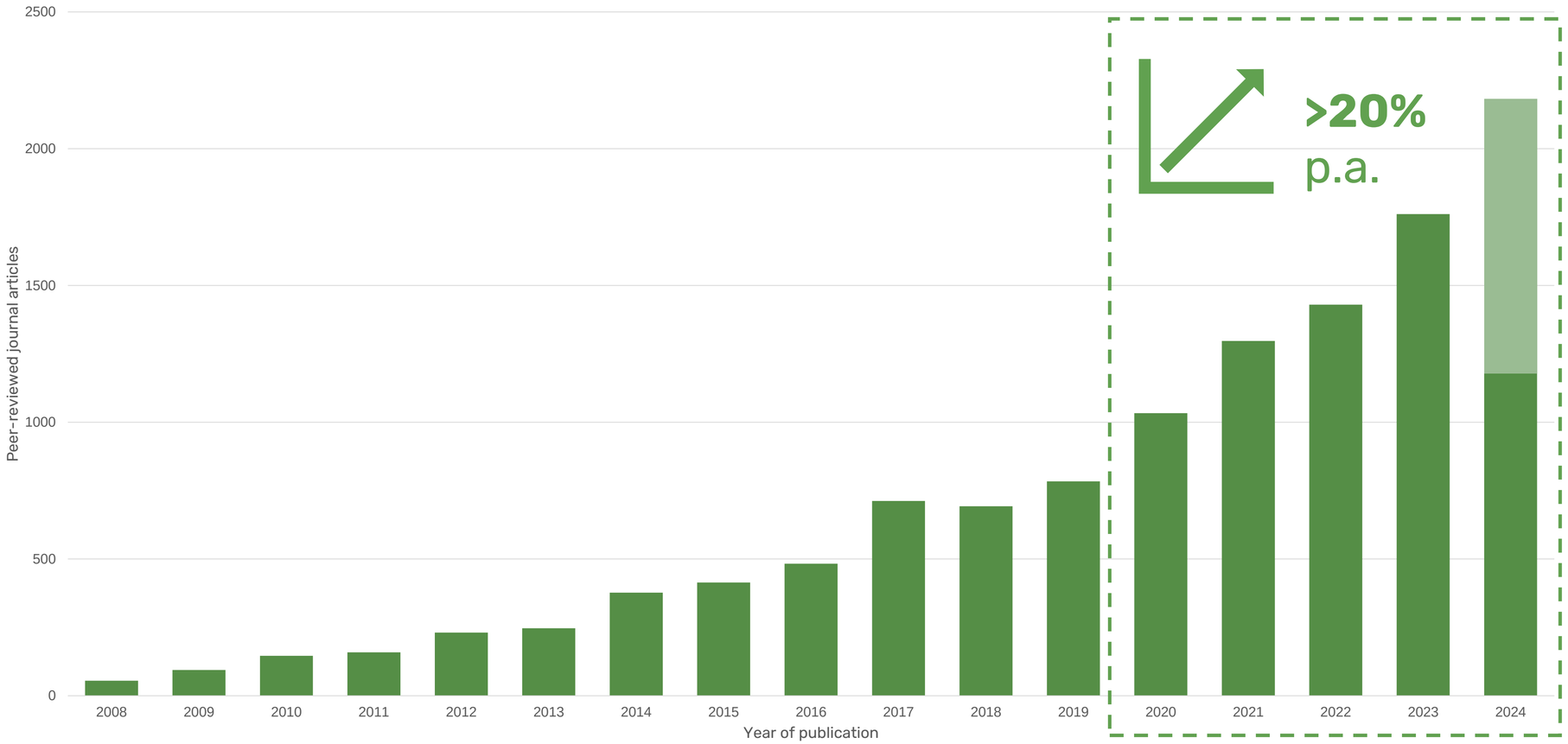
Biodiversity data in montane and arid Eurasia
Almaty, Kazakhstan

18-19 November 2024

Why track citations?

- Knowledge of where, when, how and by whom data is used
- Evidence of the impact
- Credit to data publishers
- Started in 2010
- Optimized, streamlined and automated since 2017

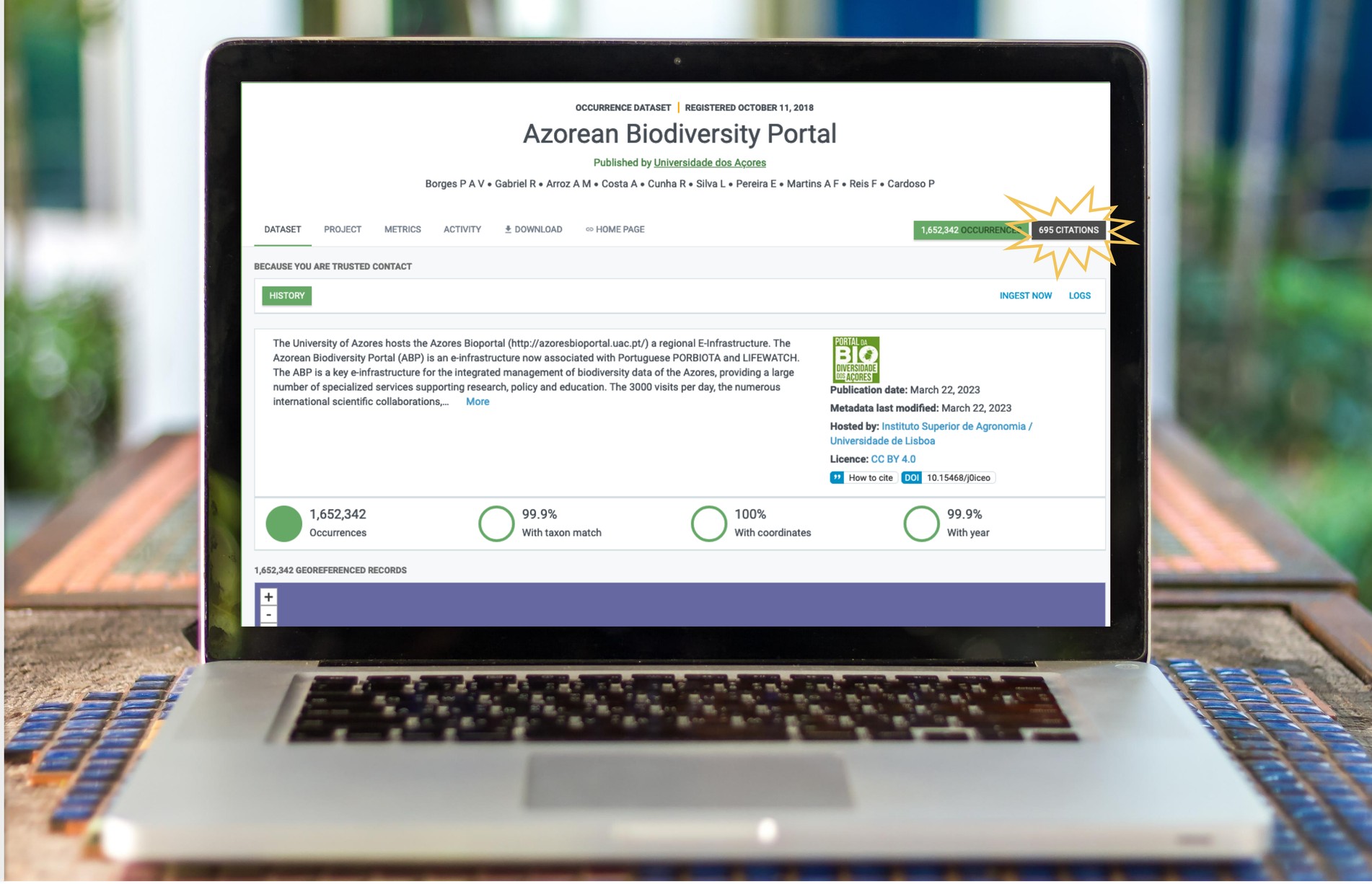
Use of GBIF-mediated data in research



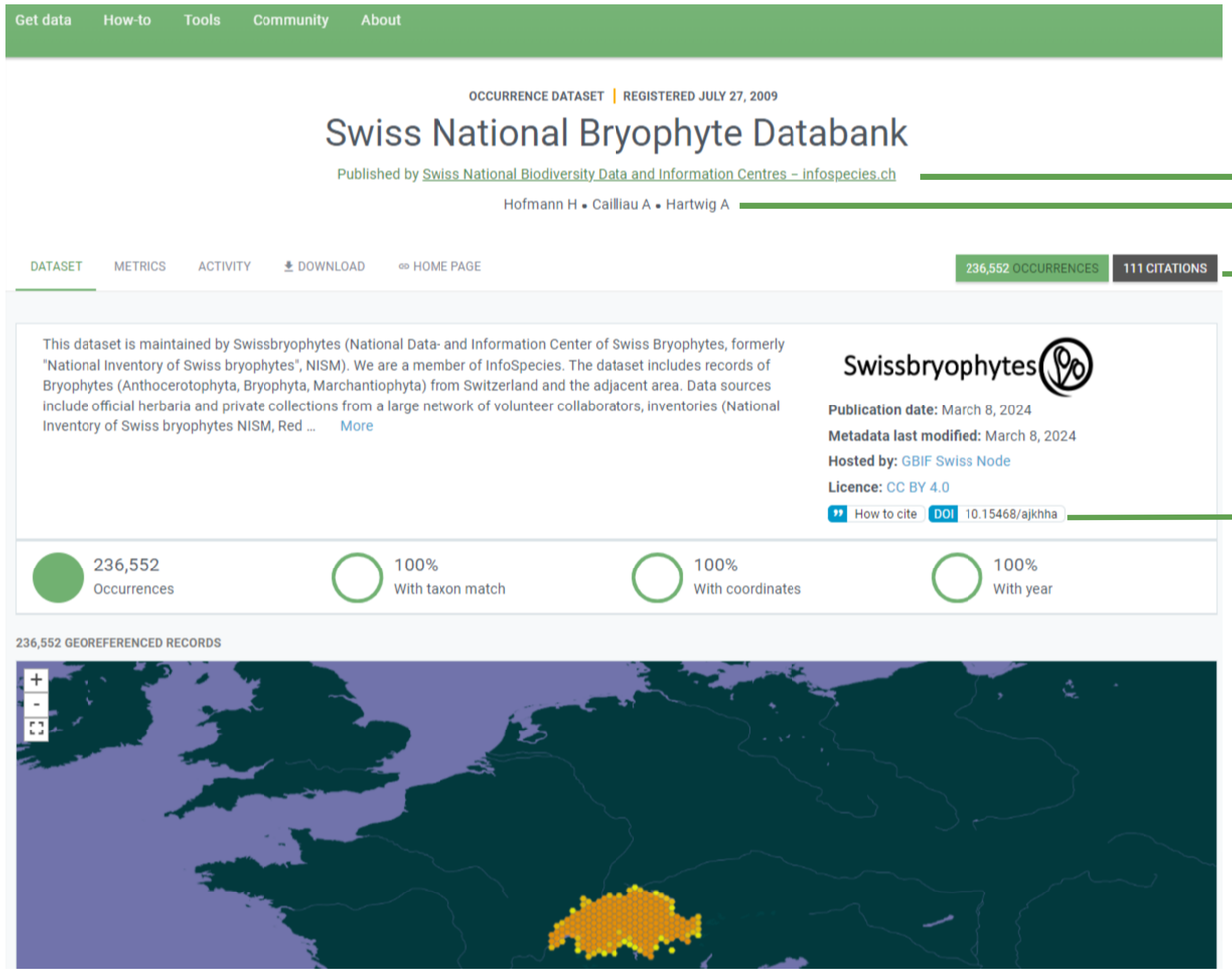
Data citations: All about the DOIs

- **DOIs** for datasets
- **DOIs** for downloads
- **DOIs** for derived datasets

- Paper ➞ (download) ➡️ dataset(s)
- Dataset citations



Data in 108,709 datasets: attribution, credit and affiliation

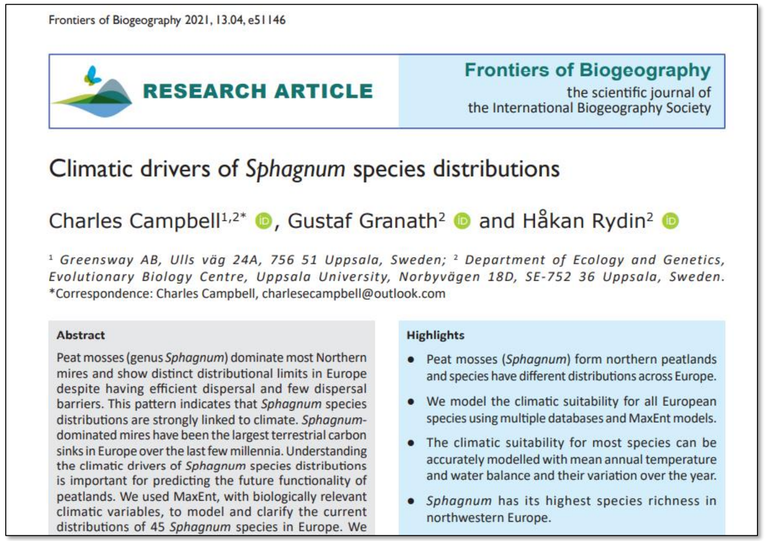


1 **Affiliation**

2 **Authorship**

3 **Data citations**

4 **DOI**



Frontiers of Biogeography 2021, 13.04, e51146

RESEARCH ARTICLE

Frontiers of Biogeography
the scientific journal of
the International Biogeography Society

Climatic drivers of *Sphagnum* species distributions

Charles Campbell[1,2*], Gustaf Granath[2] and Håkan Rydin[2]

[1] *Greensway AB, Ulls väg 24A, 756 51 Uppsala, Sweden;* [2] *Department of Ecology and Genetics, Evolutionary Biology Centre, Uppsala University, Norbyvägen 18D, SE-752 36 Uppsala, Sweden.*
*Correspondence: Charles Campbell, charlesecampbell@outlook.com

Abstract

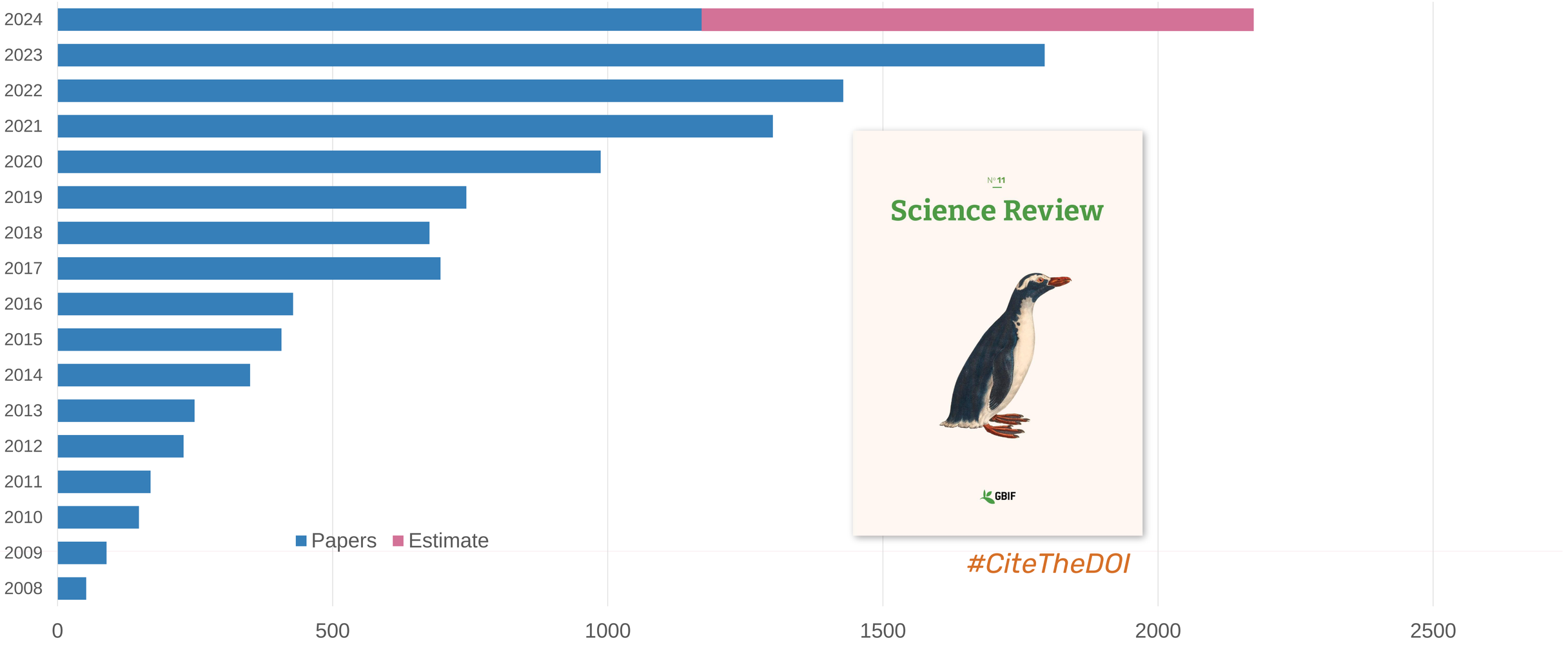
Peat mosses (genus *Sphagnum*) dominate most Northern mires and show distinct distributional limits in Europe despite having efficient dispersal and few dispersal barriers. This pattern indicates that *Sphagnum* species distributions are strongly linked to climate. *Sphagnum*-dominated mires have been the largest terrestrial carbon sinks in Europe over the last few millennia. Understanding the climatic drivers of *Sphagnum* species distributions is important for predicting the future functionality of peatlands. We used MaxEnt, with biologically relevant climatic variables, to model and clarify the current distributions of 45 *Sphagnum* species in Europe. We

Highlights

- Peat mosses (*Sphagnum*) form northern peatlands and species have different distributions across Europe.
- We model the climatic suitability for all European species using multiple databases and MaxEnt models.
- The climatic suitability for most species can be accurately modelled with mean annual temperature and water balance and their variation over the year.
- *Sphagnum* has its highest species richness in northwestern Europe.

Hofmann H, Kiebacher T, Moser T, Meier M (2021). Swiss National Bryophyte Databank. Swiss National Biodiversity Data and Information Centres – infospecies.ch. Occurrence dataset https://doi.org/10.15468/ajkhha accessed via GBIF.org on 2022-04-28.

Peer-reviewed publications using GBIF-mediated data



#CiteTheDOI

https://www.gbif.org/resource/search?contentType=literature&literatureType=journal&relevance=GBIF_USED&peerReview=true

Data citations

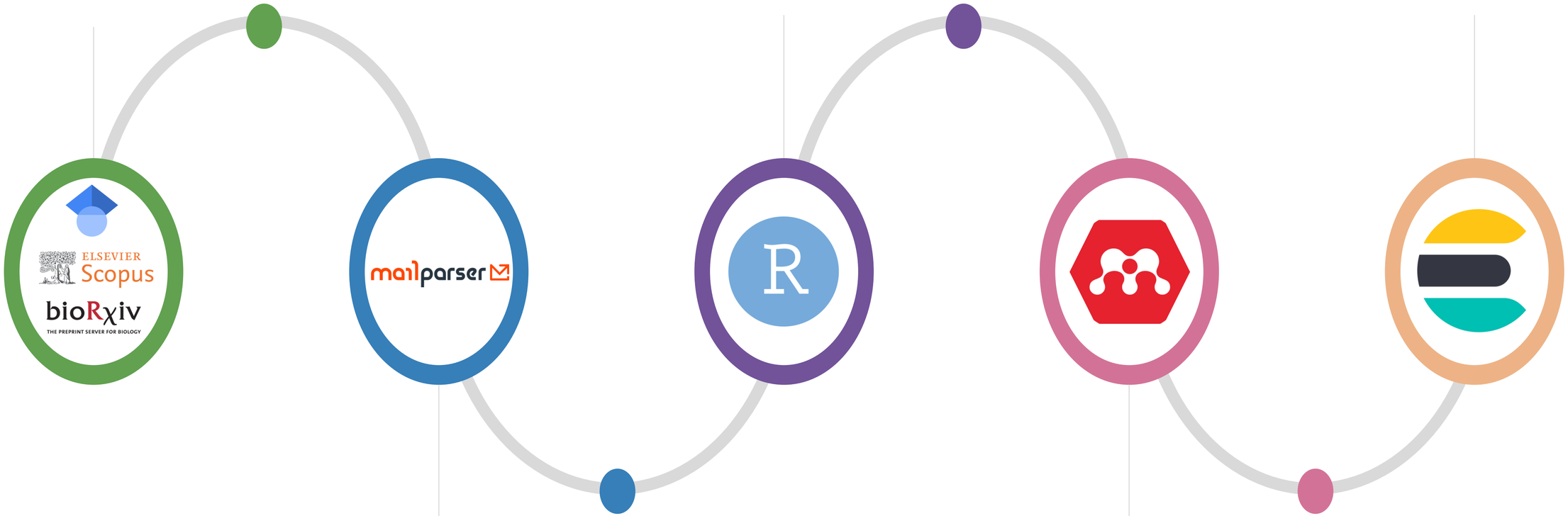
Ideal world

- All citations include a DOI, uniquely and specifically identifying the data used in a publication
- All data citations are included in the reference list of an article
- All data citations are machine-readable links between DOIs included in the DOI metadata, easily interpreted and used for quantifing citations
- 100% automatic 🤖

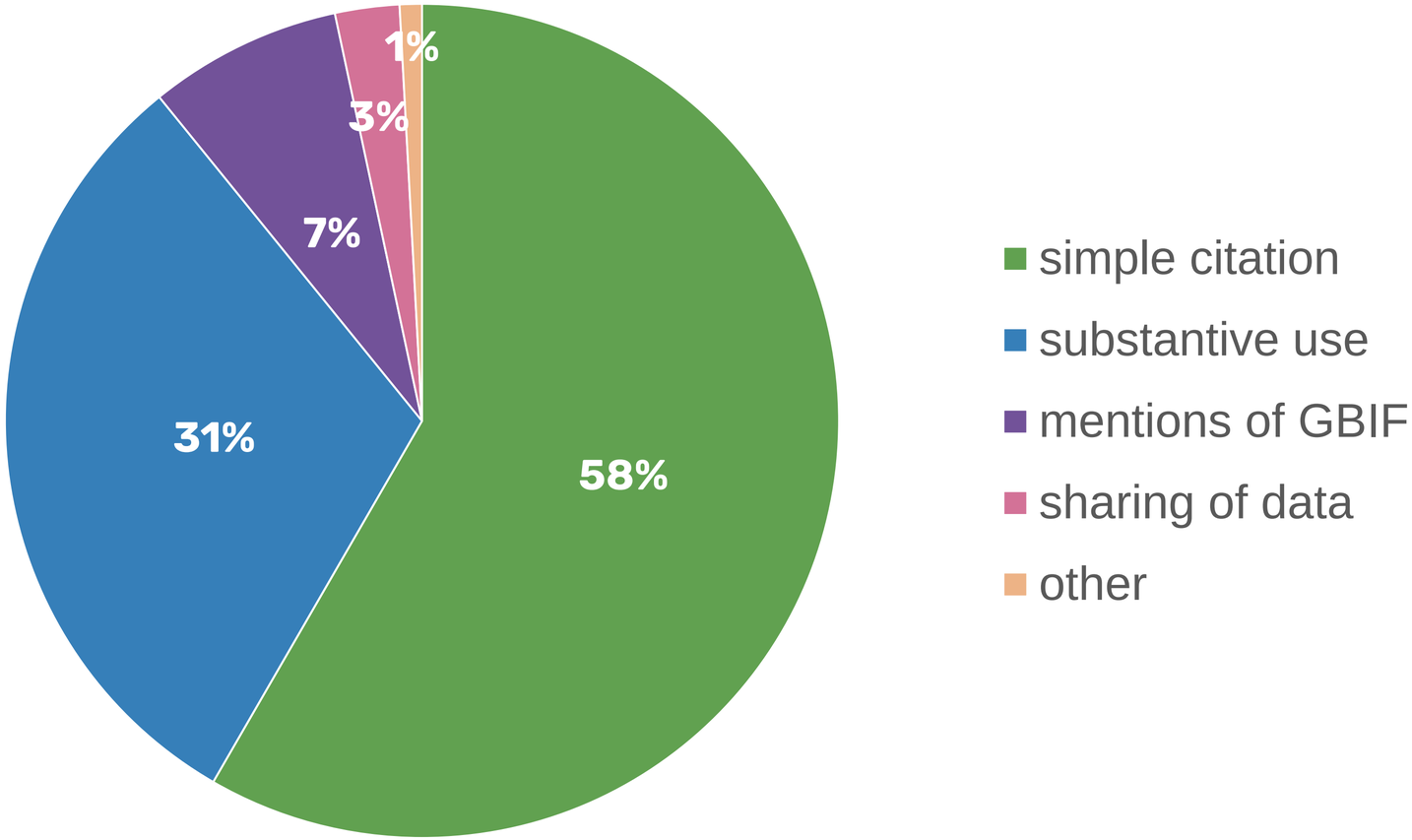
Real world

- Far from all citations include a DOI, and some tend to cite more data than is actually used
- Some citations are included in the body text of papers, some in data availability statements, and some are even hidden in supplements
- Even when done right, not all citations become available as machine-readable links between papers and dataset
- Automatic? 😰

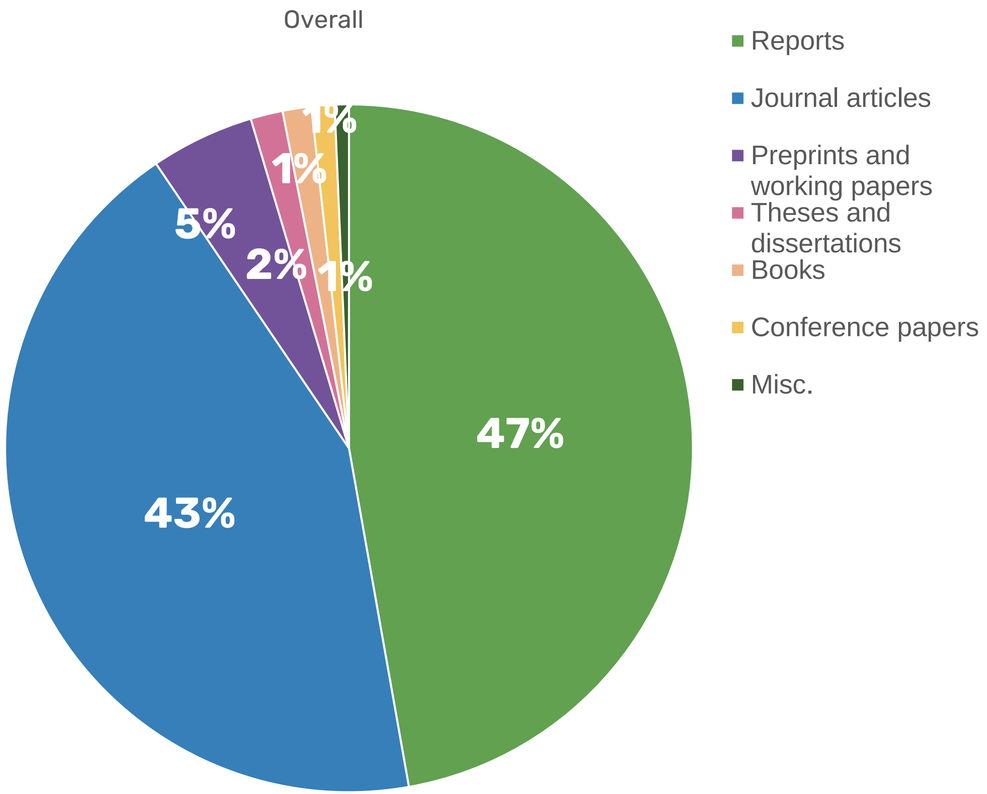
Literature tracking in GBIF

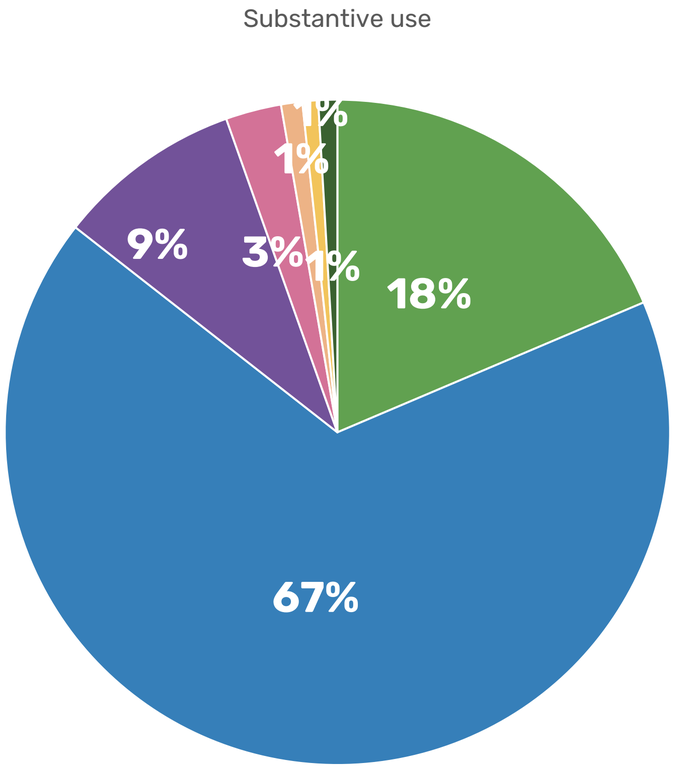


Why are papers mentioning GBIF?



Types of literature tracked





N° 11

Science Review

GBIF

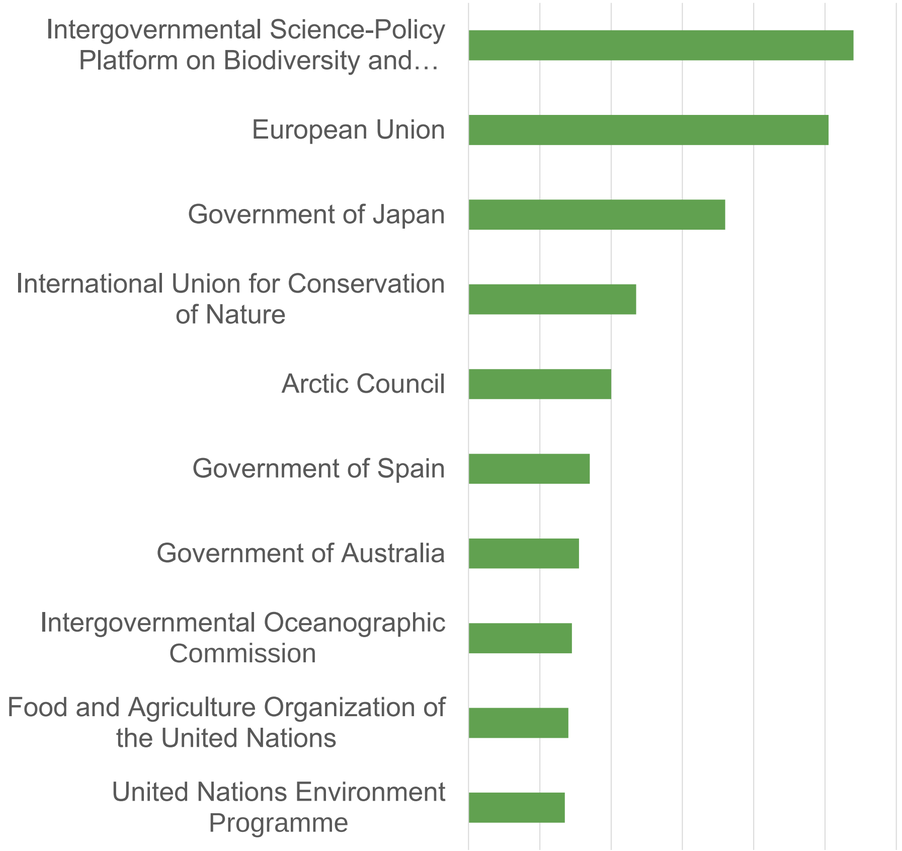
GBIF and policy

More than just research articles

Overton

The world’s largest searchable index of policy documents, guidelines, think tank publications and working papers

- ~1,400 GBIF-relevant documents identified, published by 350 bodies including more than 100 national, regional and municipal governments
- Other top contributors include IPBES, IUCN, Arctic Council, IOC-UNESCO and FAO



~10 years of tracking data use and citations

- Manuscript in progress
- Process of tracking literature
- Compiling all the findings from the programme including new deep dives into download and citation practices, taxonomic and geographic focus and more
- Stay tuned!

Dmitry Schigel
dschigel@gbif.org

@dschigel

GBIF

Tajikistan National Report

Samariddin Barotov- Node manager for GBIF in Tajikistan

Almaty 2024

Illustration: GBIF data portal

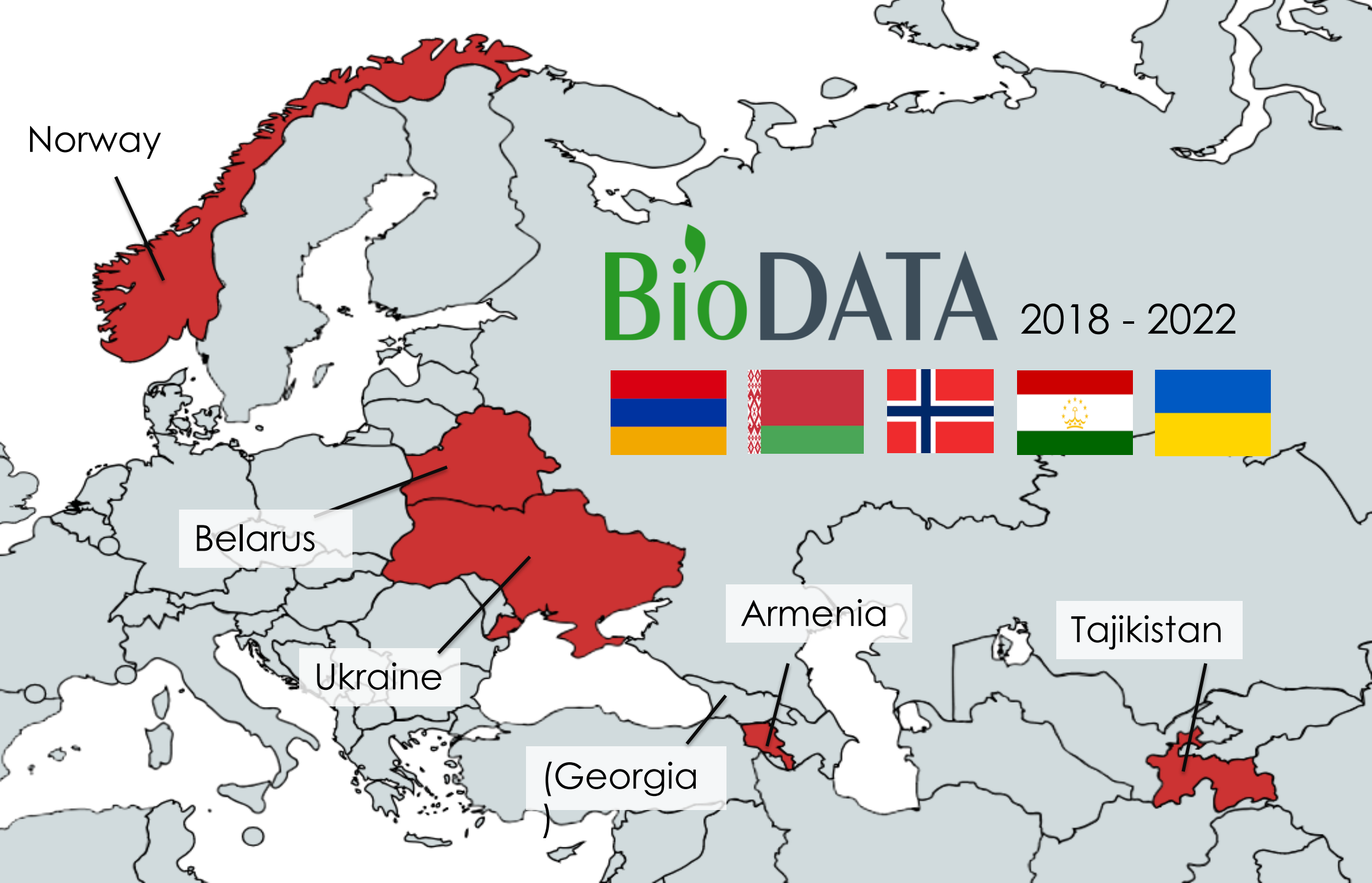
Tajikistan – Country Profile

- **Location -** The Republic of Tajikistan is an inland country located in the south-eastern part of Central Asia.
- **Population -** The population of Tajikistan as of January 1, 2023 is 10 million people.
- **Capital**: Dushanbe
- **Area**: 142,600 sq km
- **Languages**: Tajik, Russian, Uzbek, English and others

The biological diversity of Tajikistan today has more than 23,300 species of flora and fauna, and on average there are more than 164 species per thousand square kilometers of territory, which is ten times more than the world indicator.

Due to anthropogenic and other types of impact on nature, 226 plant species and 162 animal species are included in the Red Data Book of Tajikistan, which have become rare and are under threat of extinction.

The loss of agrobiodiversity in Tajikistan is especially negatively affected by the process of global climate change. Therefore, it is now necessary to take measures to preserve local of biodiversity and increase the adaptive capacity communities to climate change.


Norway
BioDATA
2018 - 2022
Belarus
Ukraine
Armenia
Tajikistan
(Georgia
)

Including additional students from Uzbekistan and Kyrgyzstan

Regional training| June 2019 | Shambari, Tajikistan

GBIF Tajikistan

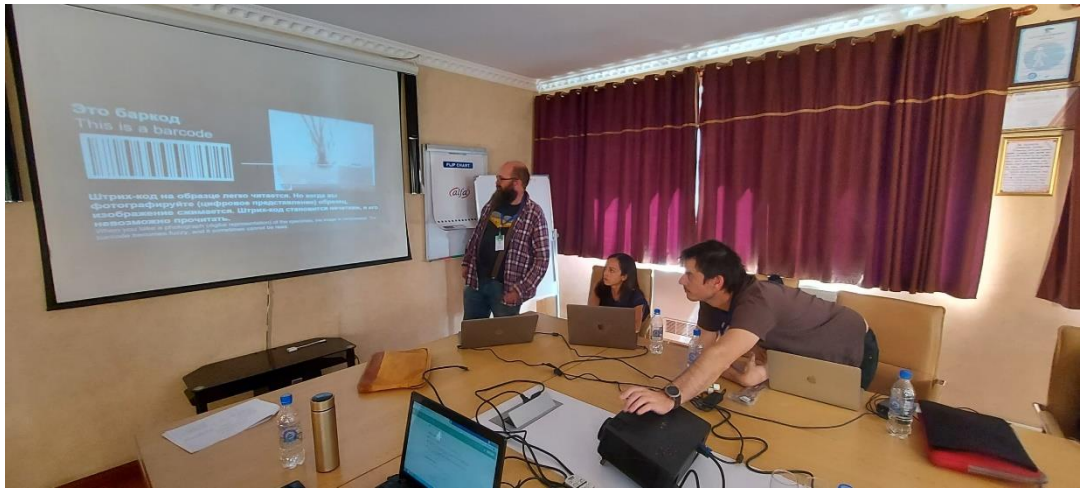
Kick-starting the biodiversity data publication process for Tajikistan ID:CESP2022-001

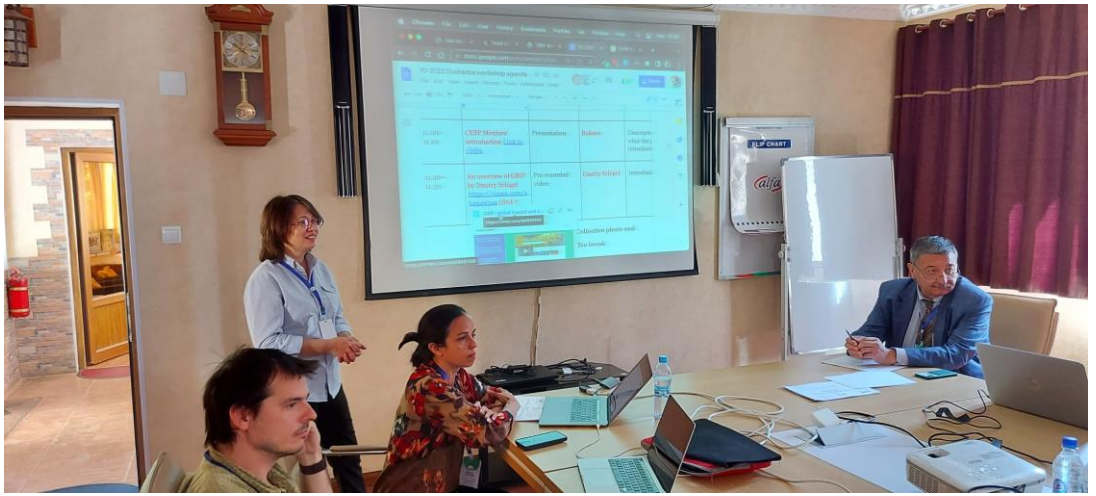
Activity Detail Summary

Activity	Description	Start Date	End Date	Deliverable or Impact
Identifying and inventorying the organizations in Tajikistan that hold specimen collections	A list of potential data publication partners and contact details. All these institutions will be registered into GRSciColl and Wikidata.	1/9/2022	26/9/2022	Impact: This will build communication and support capacity within the Tajikistan GBIF node.
Engaging key regional organizations	COVID -19 restrictions permitting, we plan 1 physical workshop/conference, with optional digital participation	27/9/2022	29/9/2022	Increased awareness of the data publication process in Tajikistan, and data publication support capacity at the Tajik GBIF Node. We can follow that up with an offer of one-on-one digital assistance from GBIF Norway in conjunction with the data publisher and GBIF Tajikistan

Digitization oflegacy biodiversity datasets inTajikistan	A digitisation workflow. This willinclude the setup for technical equipment and specimen imaging	3/10/2022	30/12/2022	Impact: Greater capacity forspecimen digitisation at the Herbarium, and more importantly greater knowledge + capacity at the Tajik node for collection digitisation and data publication”
GBIF data publication	Deliverable: Data publication of approximately 645 records of which some recordings are in a BRAHMS database. Data will be visible on gbif.org and on https://tajik.ipt.gbif.no	3/1/2023	30/6/2023	Impact: Increased coverageof important biodiversityinformation for a region withlimited published data

Training workshop in Tajikistan





PUBLISH FIRST

A novel, rapid digitisation/publishing workflow for herbaria low on staff time and technical resources

26 - 28 SEPT 2022: GBIF CESP WORKSHOP

STEPS – 1: SCAN

2: Upload

BUCKET

MINIO

(See: https://min.io)

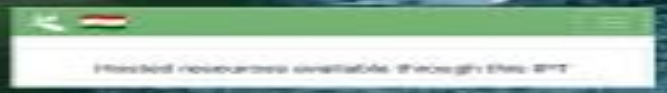
A python app listens to create events on the bucket

Google Vision API

parses handwritten and printed text in image – some mistakes but generally good, even with handwritten cyrillic

Google Translate API for the Russian translation (original and translation are stored verbatim in dwc:dynamicProperties)

A simple parser splits out obvious label information (scientific name, altitude, etc). This is output into a dwc stored on the bucket



IPT set up to publish automatically from source file on bucket

Get data How-to Tools Community About samariddinbarot

Tajikistan

An associate participant from Europe and Central Asia
Names of countries and areas are based on the ISO 3166-1 standard

SUMMARY DATA ABOUT DATA PUBLISHING PARTICIPATION ALIEN SPECIES MORE... ACTIVITY REPORT

DATA FROM TAJIKISTAN

53,160	4	26	5
Published occurrences	Published datasets	Countries and areas covered by data from Tajikistan	Publishers from Tajikistan

Get data How-to Tools Community About samariddinbarot

Tajikistan

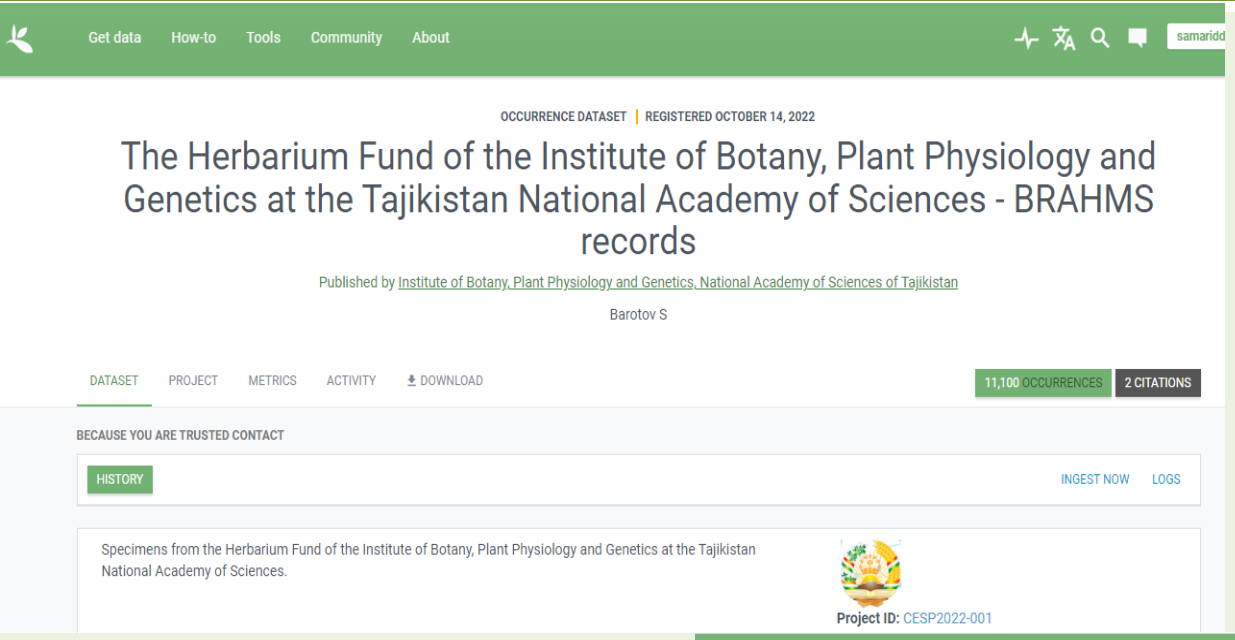
An associate participant from Europe and Central Asia
Names of countries and areas are based on the ISO 3166-1 standard

SUMMARY DATA ABOUT DATA PUBLISHING PARTICIPATION ALIEN SPECIES MORE... ACTIVITY REPORT

DATA ABOUT TAJIKISTAN

126,438	454	35	211
Occurrences	Datasets	Countries and areas contribute data	Publishers

Achievements GBIF Tajikistan



Achievements GBIF Tajikistan

During the implementation project, we organized several virtual meetings about the evaluation and monitoring of the project with our main partners GBIF team Norway. About evaluation and monitoring local organization I personally visited to the Universities. During my 3h lecture, I explained for teachers and student's biological faculty about data publication in the GBIF one more again. From students and teachers were most interest about our project it talks about outputs and deliverables and capacity building young generations. Implementation project is going well efficiency that we connected 4 local organizations. The strength side that in our workshop participated around 27 young specialist from different of regions of Tajikistan.

Achievements GBIF Tajikistan

TNU


Клетка животных
В чем сходство и отличие данных клеток?
1. Сходство строения – единство происхождения.
2. Различия – разные пути эволюции


GBIF

TPU

OCCURRENCES PER KINGDOM

BEFORE

NOW

The Herbarium Fund of the Institute of Botany, Plant Physiology and Genetics at the Tajikistan National Academy of Sciences - BRAHMS records

Occurrence dataset

Specimens from the Herbarium Fund of the Institute of Botany, Plant Physiology and Genetics at the Tajikistan National Academy of Sciences.

Published by Institute of Botany, Plant Physiology and Genetics, National Academy of Sciences of Tajikistan

11 100 occurrences | 12 citations

The Herbarium of Tajik National University

Occurrence dataset

This dataset contains specimens from the herbarium at Tajik National University. Tajik National University was established by the Resolution of the Soviet of Ministries of the USSR 21st of March 1947,...

Published by Tajik National University

259 occurrences | 3 citations

Khatlon Scientific Center

Occurrence dataset

This dataset contains specimens from the herbarium at Khatlon Scientific Center. The specimens were imaged by herbarium staff, and published via an automatic process: 1) OCR text was gathered from th...

Published by Khatlon Scientific Center of the National Academy of Sciences of Tajikistan

140 occurrences | 1 citation

The Herbarium Fund of the Institute of Botany, Plant Physiology and Genetics at the Tajikistan National Academy of Sciences - BRAHMS records

Occurrence dataset

Specimens from the Herbarium Fund of the Institute of Botany, Plant Physiology and Genetics at the Tajikistan National Academy of Sciences.

Published by Institute of Botany, Plant Physiology and Genetics, National Academy of Sciences of Tajikistan

11 100 occurrences | 25 citations

The Herbarium of Tajik National University

Occurrence dataset

This dataset contains specimens from the herbarium at Tajik National University. Tajik National University was established by the Resolution of the Soviet of Ministries of the USSR 21st of March 1947,...

Published by Tajik National University

259 occurrences | 7 citations

Khatlon Scientific Center

Occurrence dataset

This dataset contains specimens from the herbarium at Khatlon Scientific Center. The specimens were imaged by herbarium staff, and published via an automatic process: 1) OCR text was gathered from th...

Published by Khatlon Scientific Center of the National Academy of Sciences of Tajikistan

140 occurrences | 6 citations

Thank you!!
Questions?

Samariddin Barotov GBIF Node Manager for Tajikistan
barotov.ikai@mail.ru
www.gbif.org

Data publishing with GBIF: concepts and tools

Laura Anne Russell | Training Officer

Presented and adapted by: Salza Palpurina| ECA support team

GBIF Global Biodiversity Information Facility

Xanthoria calcicola Oxner observed in Belgium by Frederik V. Holsbeeck (licensed under CC BY-NC)

Slides adapted from the Biodiversity Data Mobilization Course and EBRD presentation

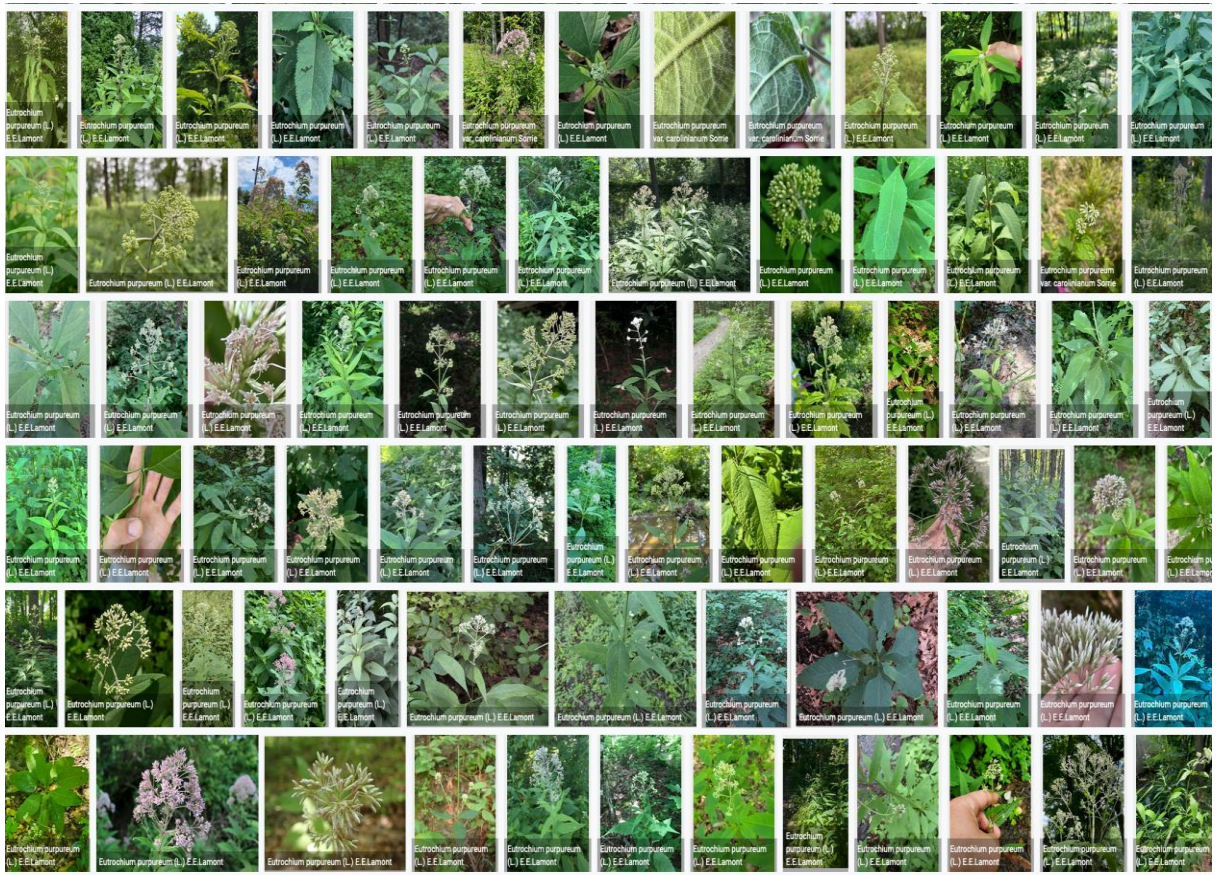
Species occurrence records

3,024,404,259

Multimedia evidence

210.7 million records with **taxonomically identified images**

- 137.4 million human observations
- 63.8 million specimens
- 7.3 million material samples
- 1.4 million fossil specimens



https://www.gbif.org/occurrence/gallery

Incentives for publishing open-access biodiversity data

- contributes to global knowledge about biodiversity
- reveals new opportunities for collaboration
- gives visibility to publishing institutions
- reveals usage and citations of digitized data
- fulfills requirements to make data freely accessible

https://www.gbif.org/publishing-data#_incentives-for-publishing-open-access-biodiversity-data

BECOME A PUBLISHER

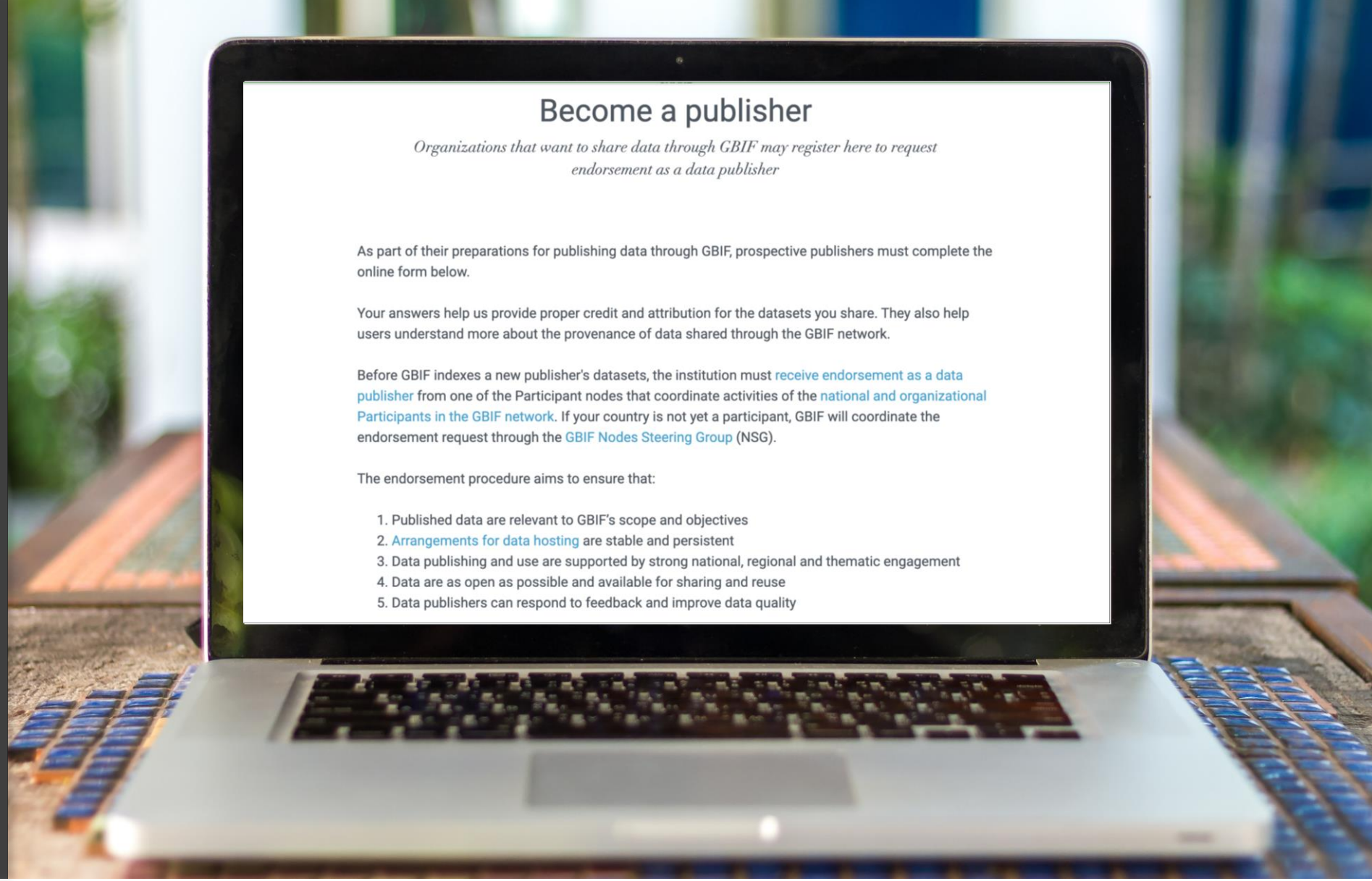
Agree to the terms

Complete the form

Wait for endorsement

Prepare data

Publish / register data with GBIF

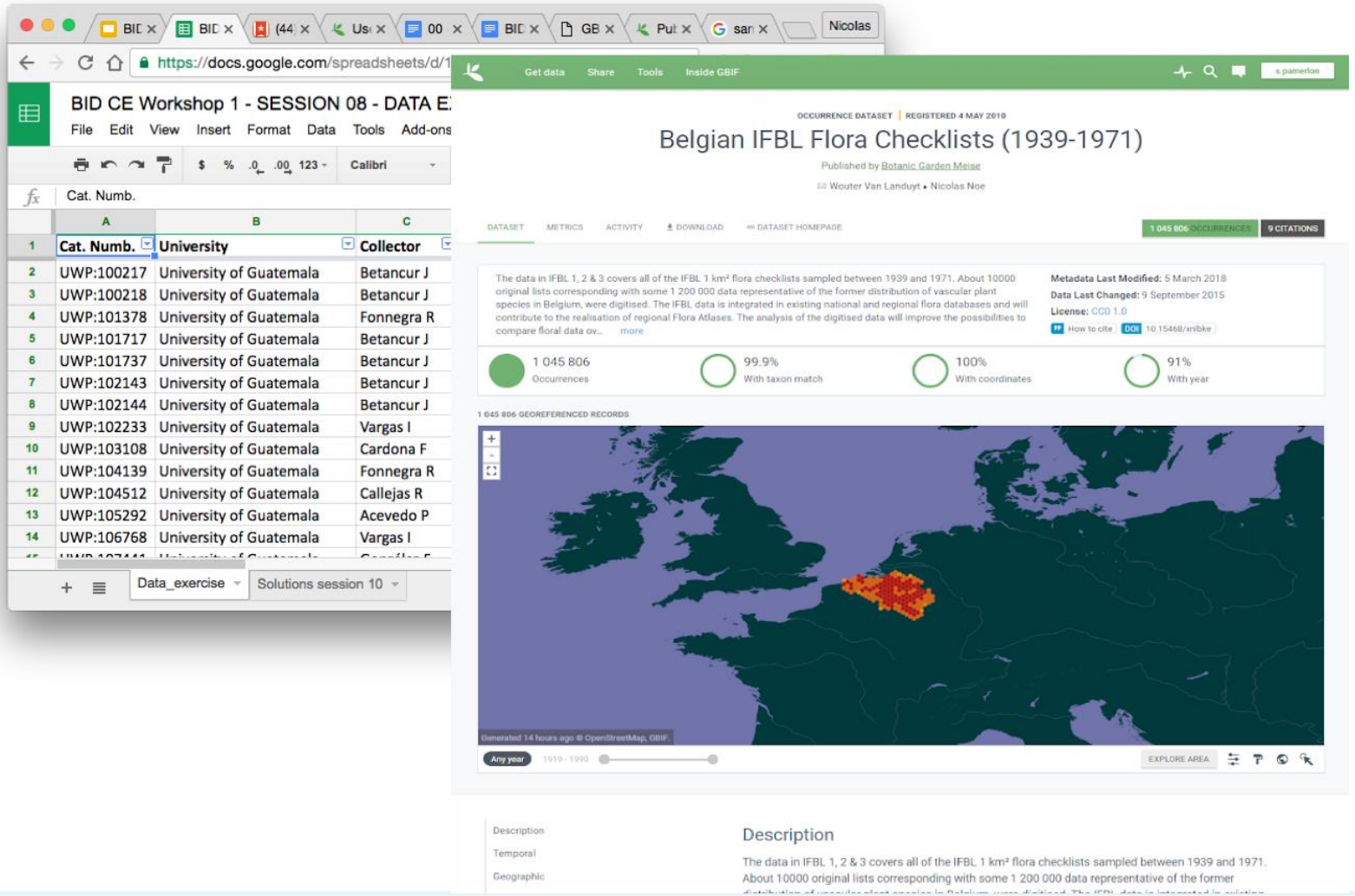


https://www.gbif.org/become-a-publisher

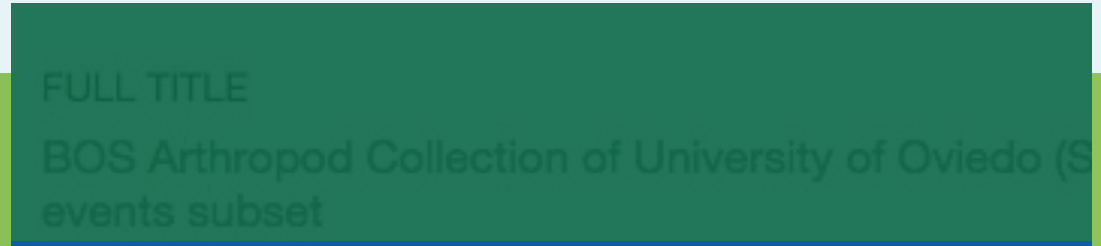
Publisher page

https://www.gbif.org/publisher/0255f116-fd08-4b15-9eb3-2b4e2062a323

SHARING YOUR DATA WITH GBIF.ORG



DATA RICHNESS LEVELS
SUPPORTED BY GBIF



Dataset description, taxonomic/geographic/temporal scope, methodology

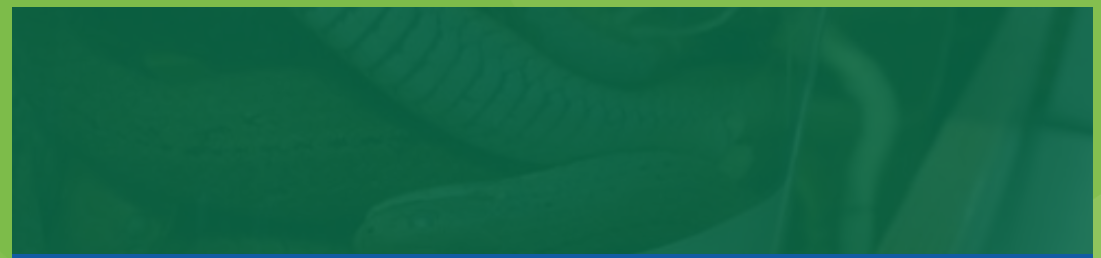
01

Dataset metadata

List based on geography, taxonomy, theme (e.g. invasive, medicinal)

02

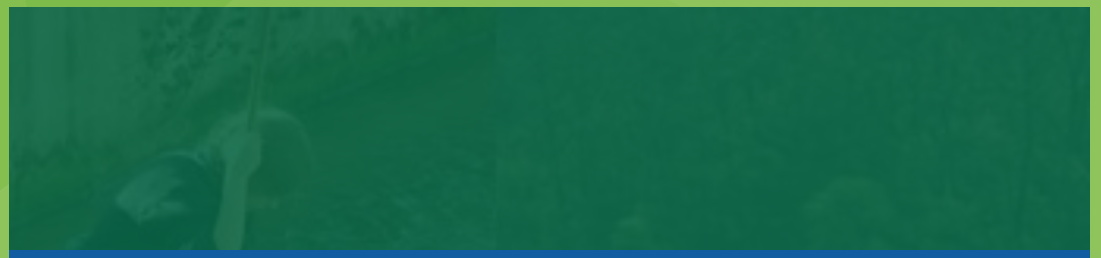
Species checklists



Species occurrences based on observation/collection, dates, coordinates

03

Occurrence-only data



Occurrences associated with survey/sample, protocol, effort, abundance

04

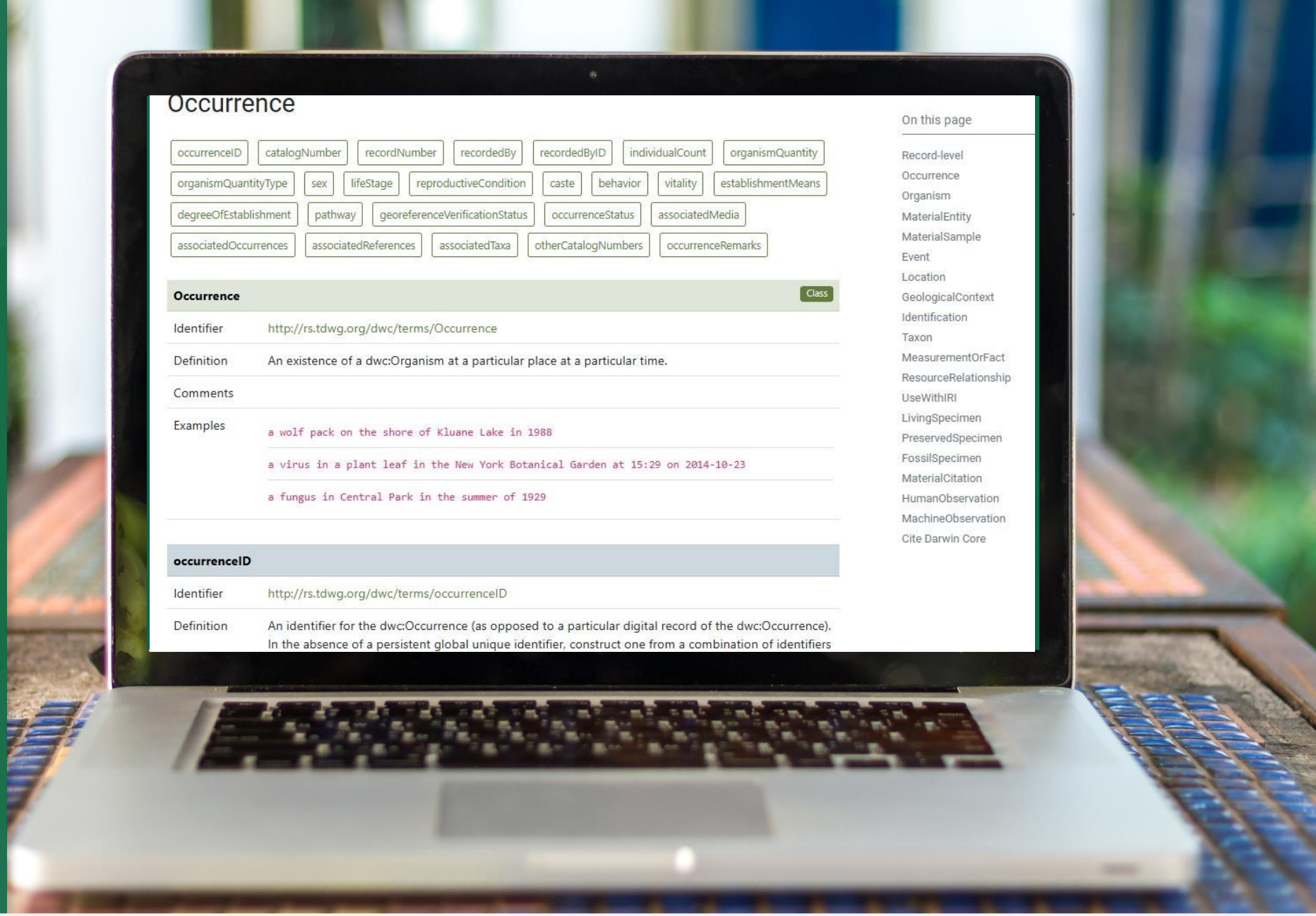
Sampling-event data

https://www.gbif.org/dataset-classes

GBIF

DARWIN CORE

"List of fields and their definitions, as they relate to biodiversity data."



https://dwc.tdwg.org/terms/ https://rs.gbif.org/core/dwc_occurrence_2022-02-02.xml

CREATIVE COMMONS WAIVER AND LICENSES

All data published and registered for use in the GBIF portal, must be issued with one of three Creative Commons licenses.

CC0

For data made available for any use without any restrictions

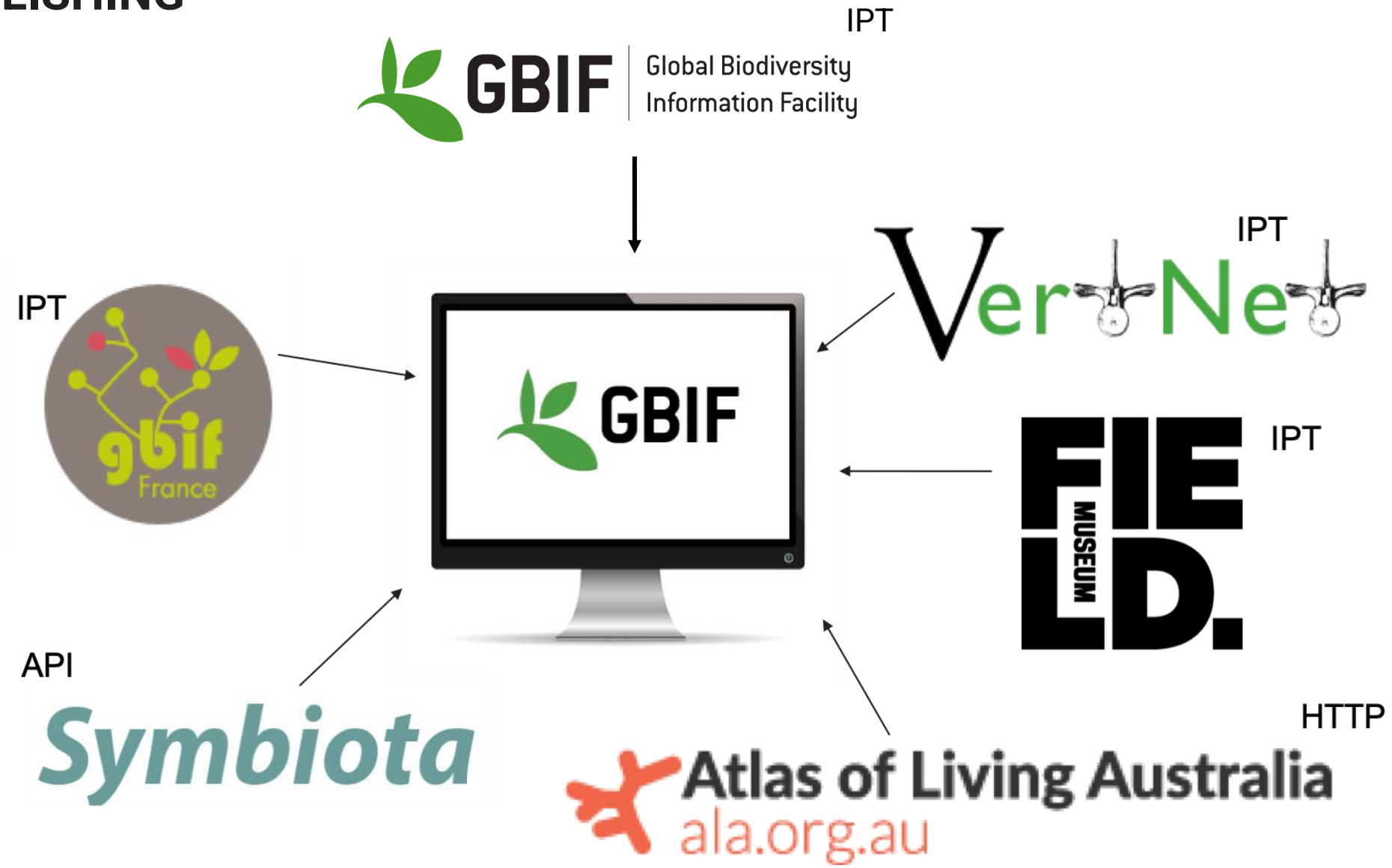
CC BY

For data made available for any use with appropriate attribution

CC BY-NC

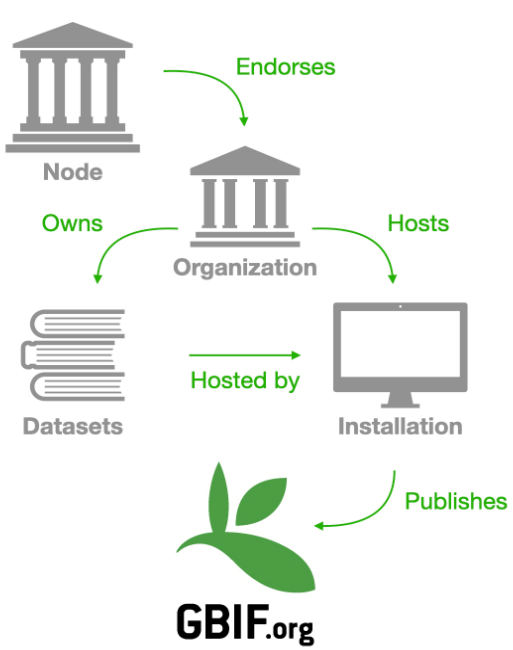
For data made available for any non-commercial use with appropriate attribution

DATA PUBLISHING

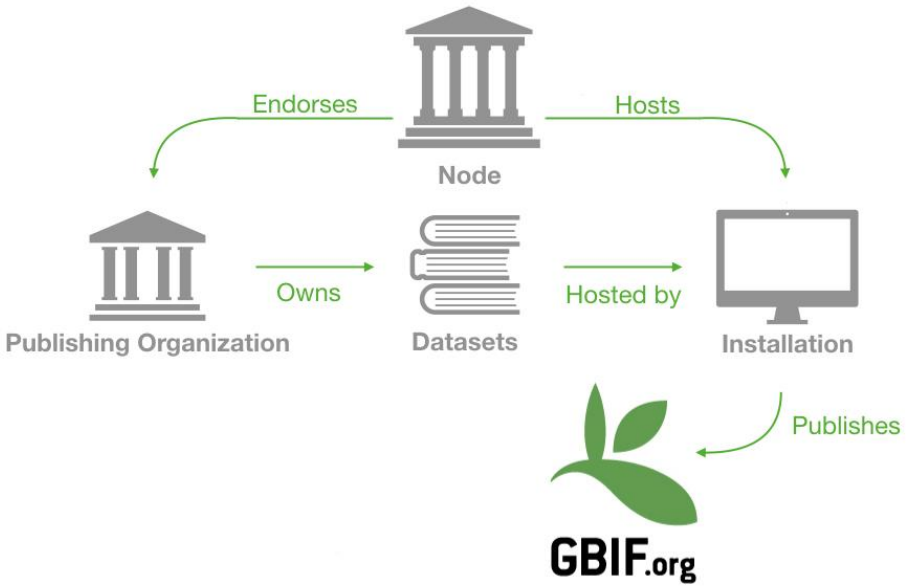


https://www.gbif.org/data-hosting
https://data-blog.gbif.org/post/installations-and-hosting-solutions-explained/

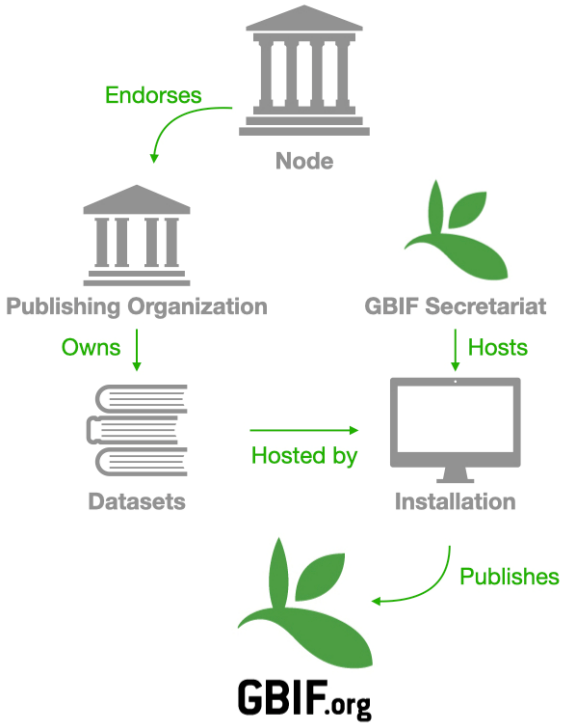
Hosting models



Organization-hosted installation



Node-hosted installation

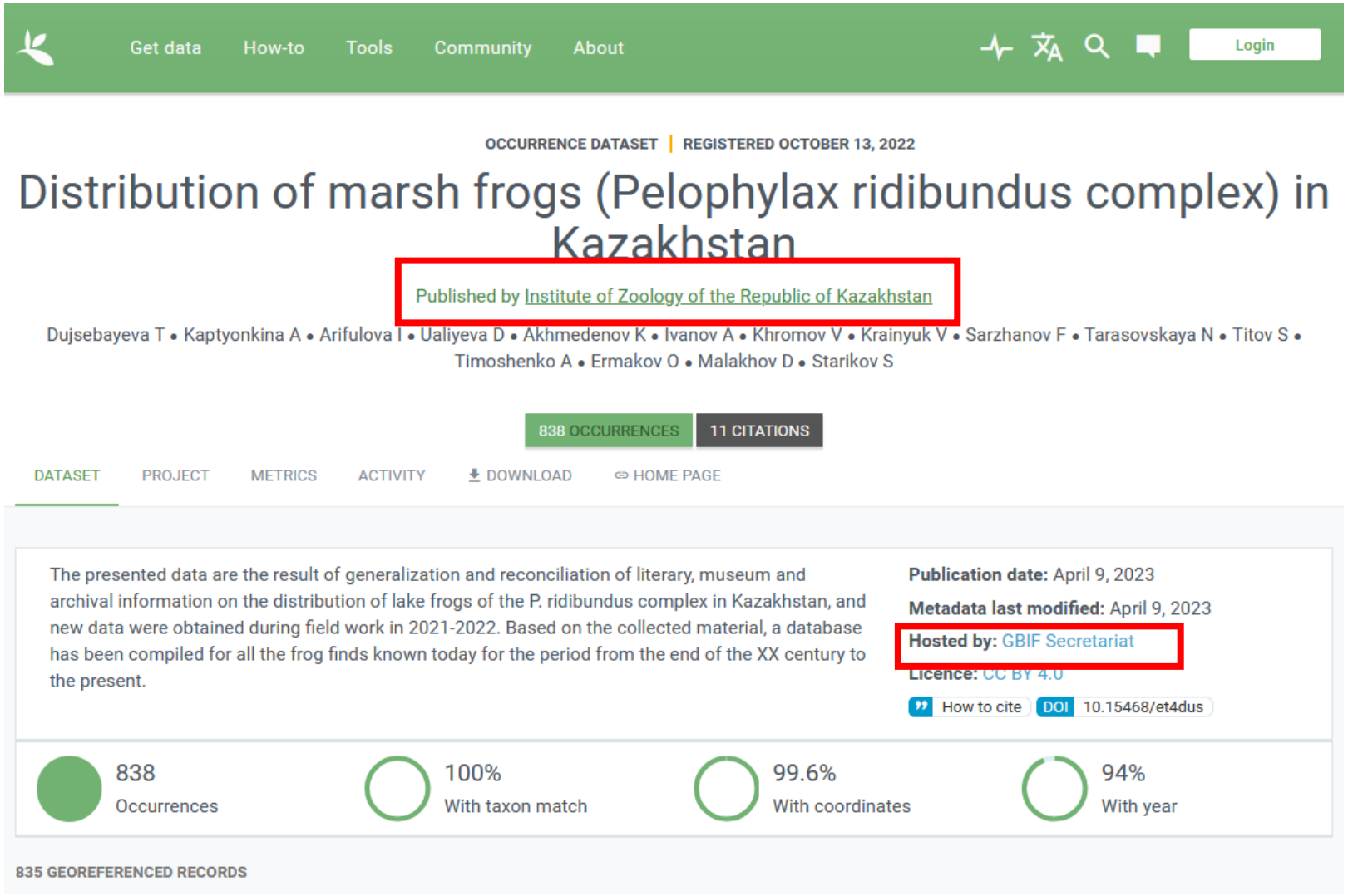


GBIF-hosted installation

Publishing organization ≠ Hosting installation

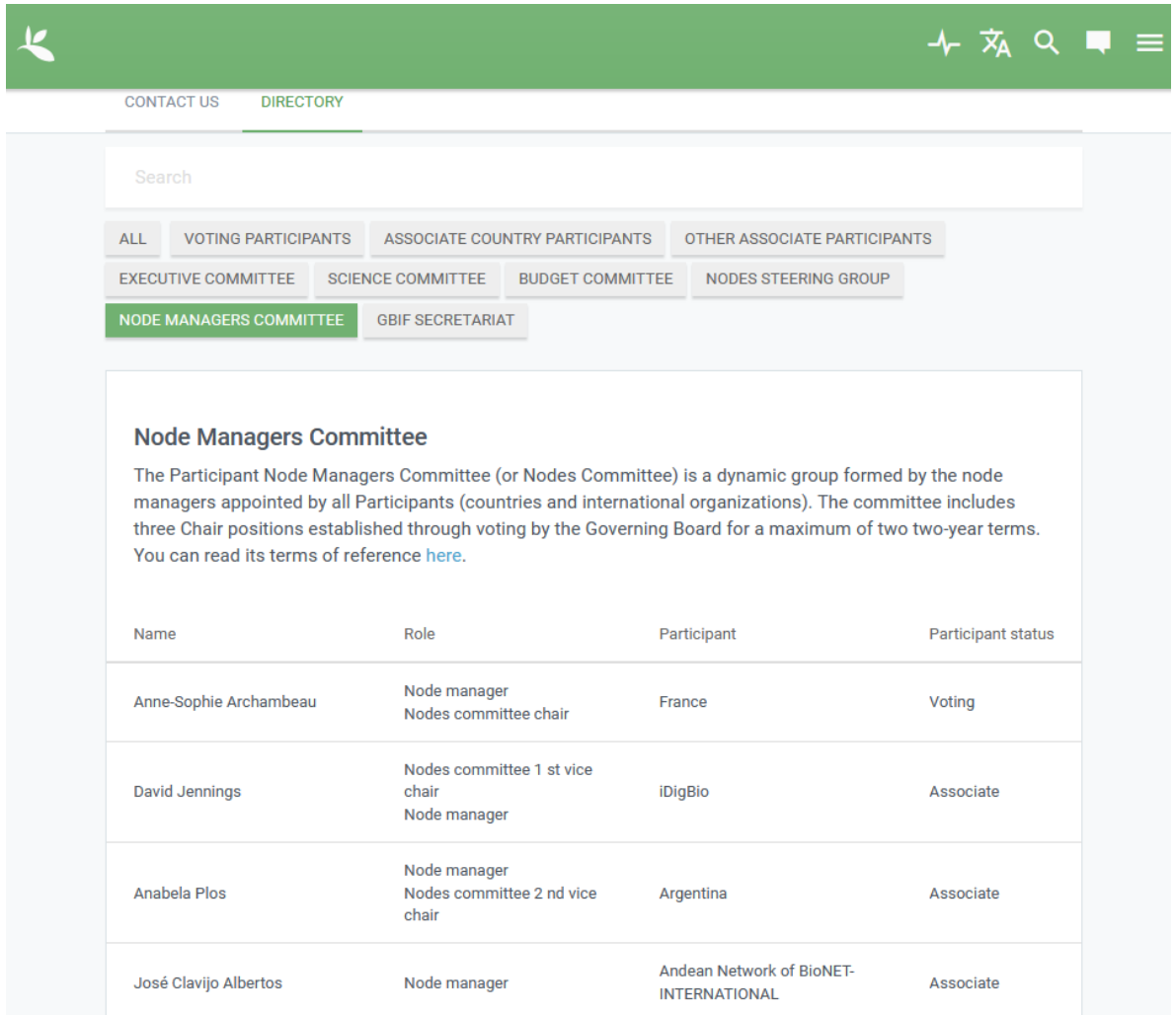
https://www.gbif.org/data-hosting
https://data-blog.gbif.org/post/installations-and-hosting-solutions-explained/

A dataset published by Institute of Zoology of the Republic Kazakhstan but hosted by GBIF Secretariat

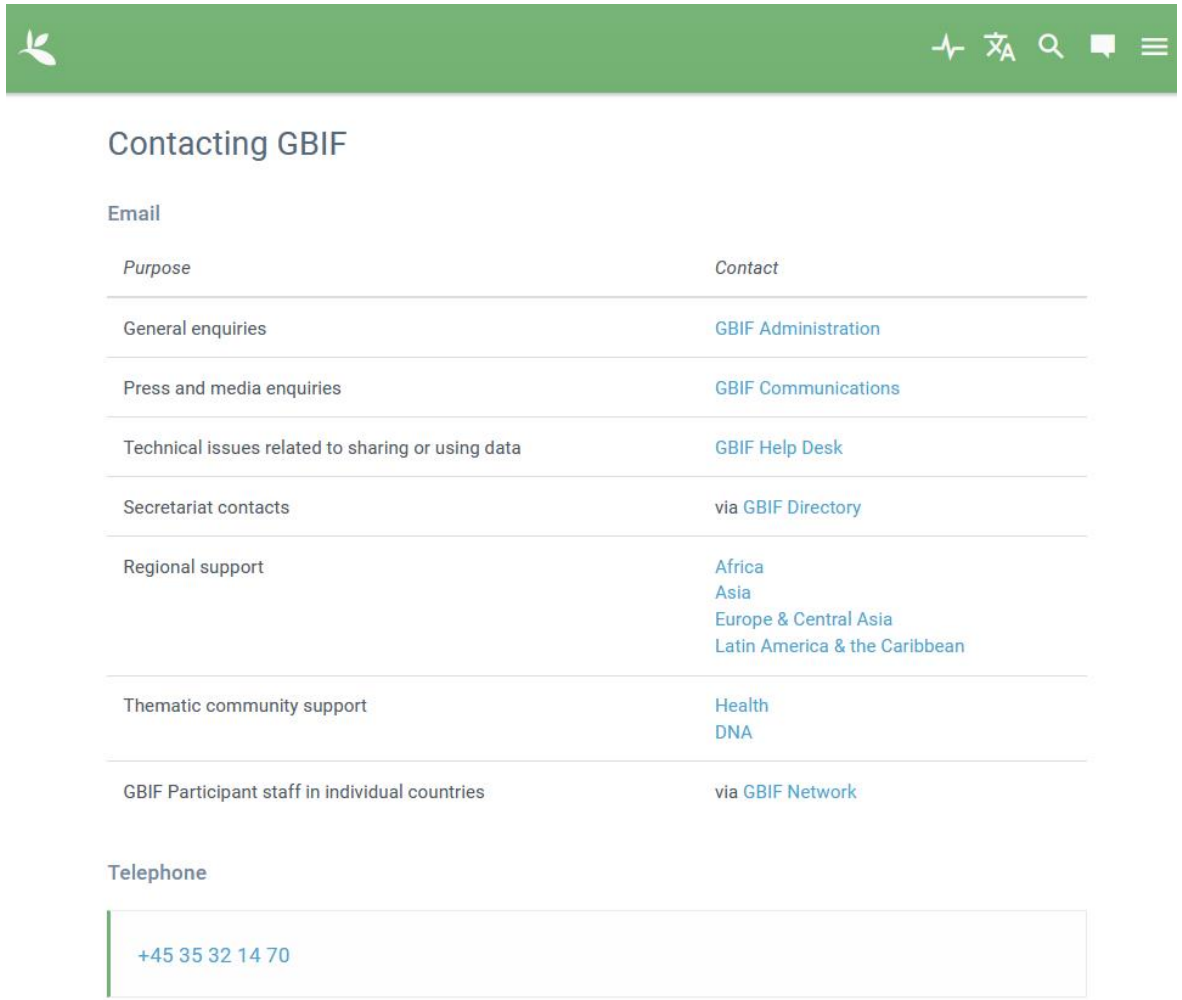


https://www.gbif.org/dataset/78f7dbd8-859a-4d46-a278-85439d28db49

Node or Regional support



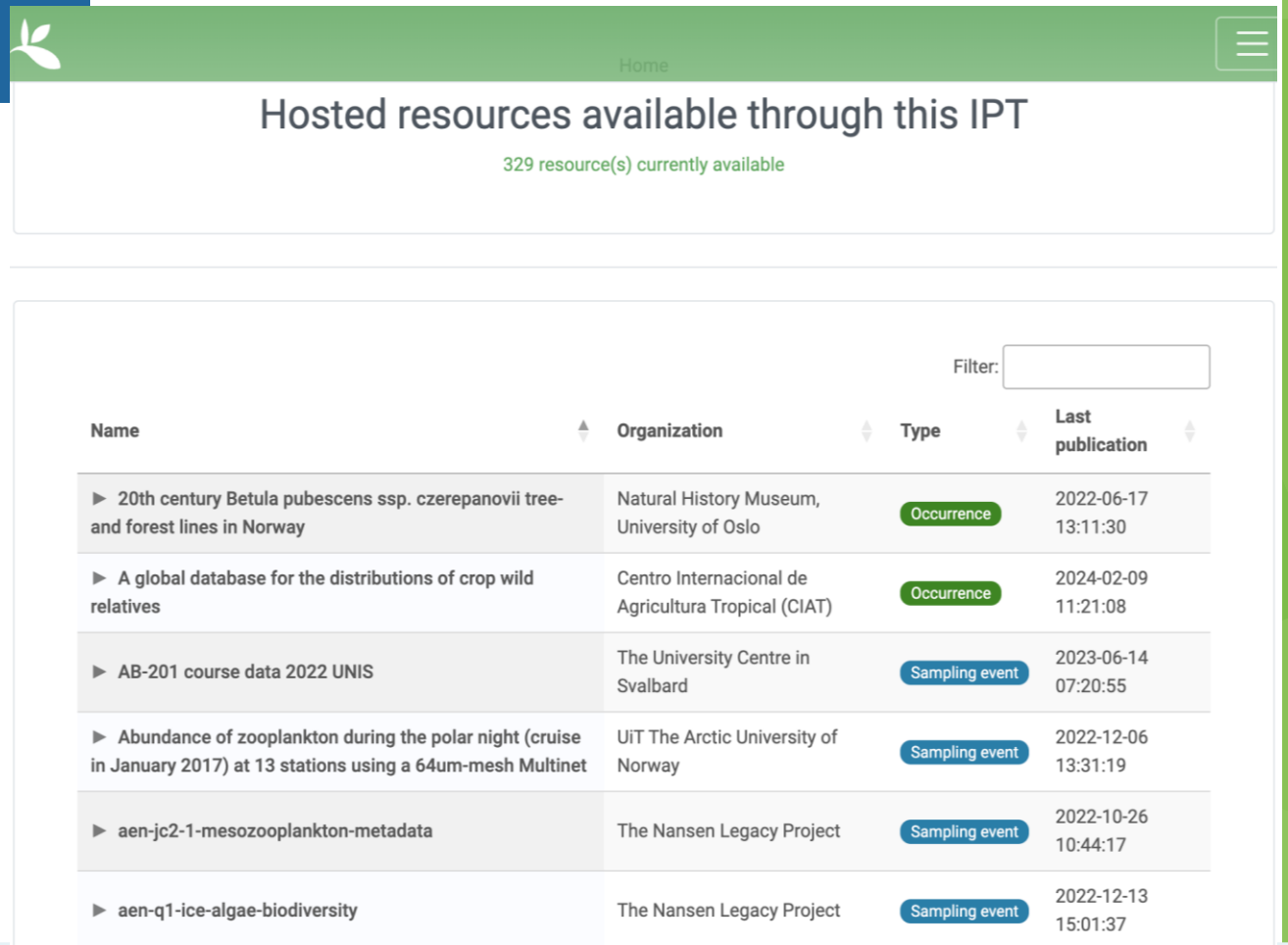
https://www.gbif.org/contact-us/directory?group=nodesCommittee



https://www.gbif.org/contact-us

INTEGRATED PUBLISHING TOOLKIT

- Main (*but not only*) publishing tool for GBIF
- One IPT can host many datasets, on behalf of several institutions, while giving proper credit
- Test mode and production mode
- Multilingual – 7 languages
- Server-side software, needs a stable connection

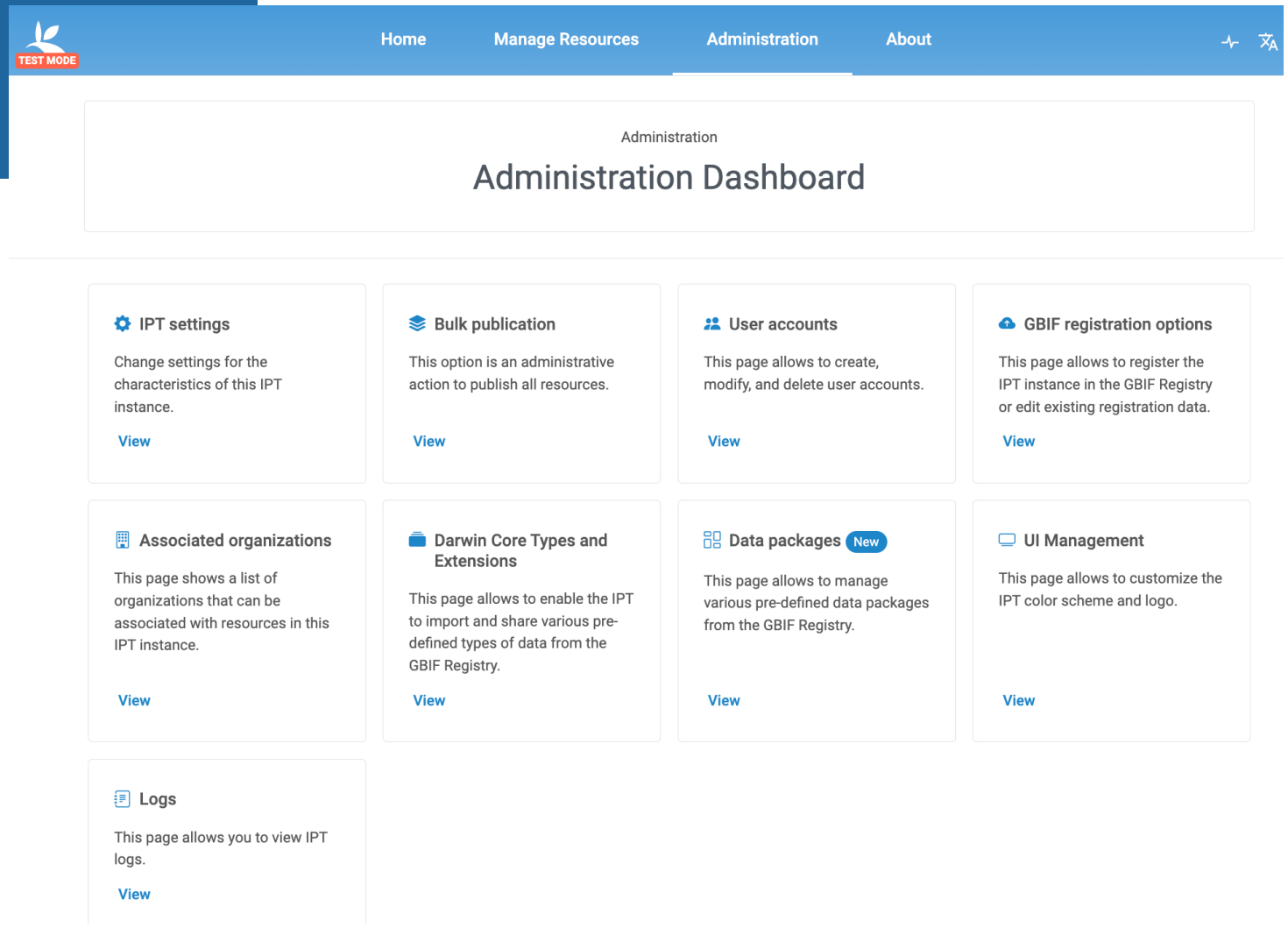


https://www.gbif.org/ipt

GBIF

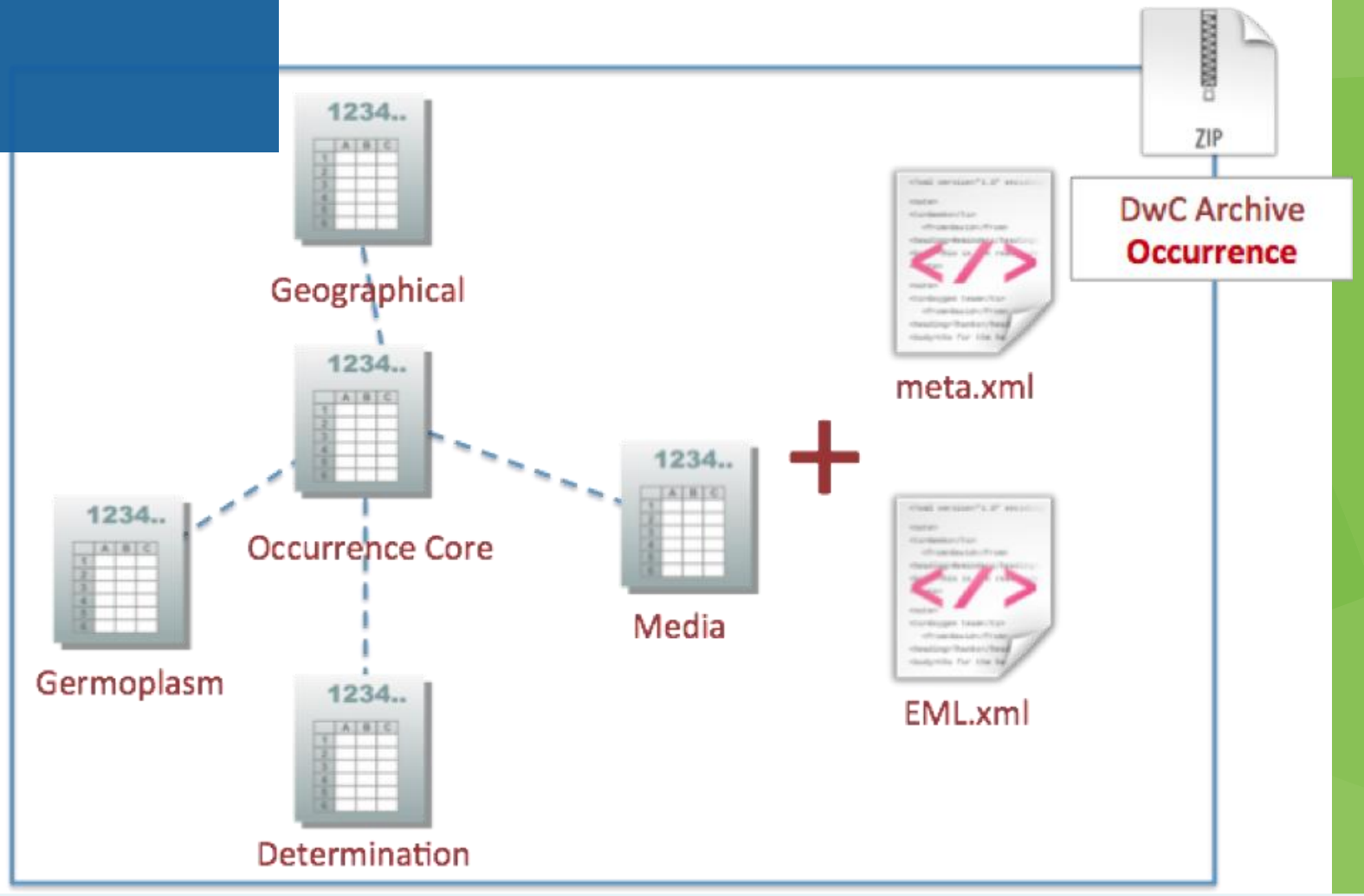
IPT ADMINISTRATION

- An IPT requires an administrator to:
- Manage user accounts
- Manage publishing organizations
- Manage extensions



DARWIN CORE ARCHIVE WITH EXTENSIONS

- Occurrence Core
  - Media extension
  - Determination extension
  - Germoplasm extension
- Meta file
- EML file



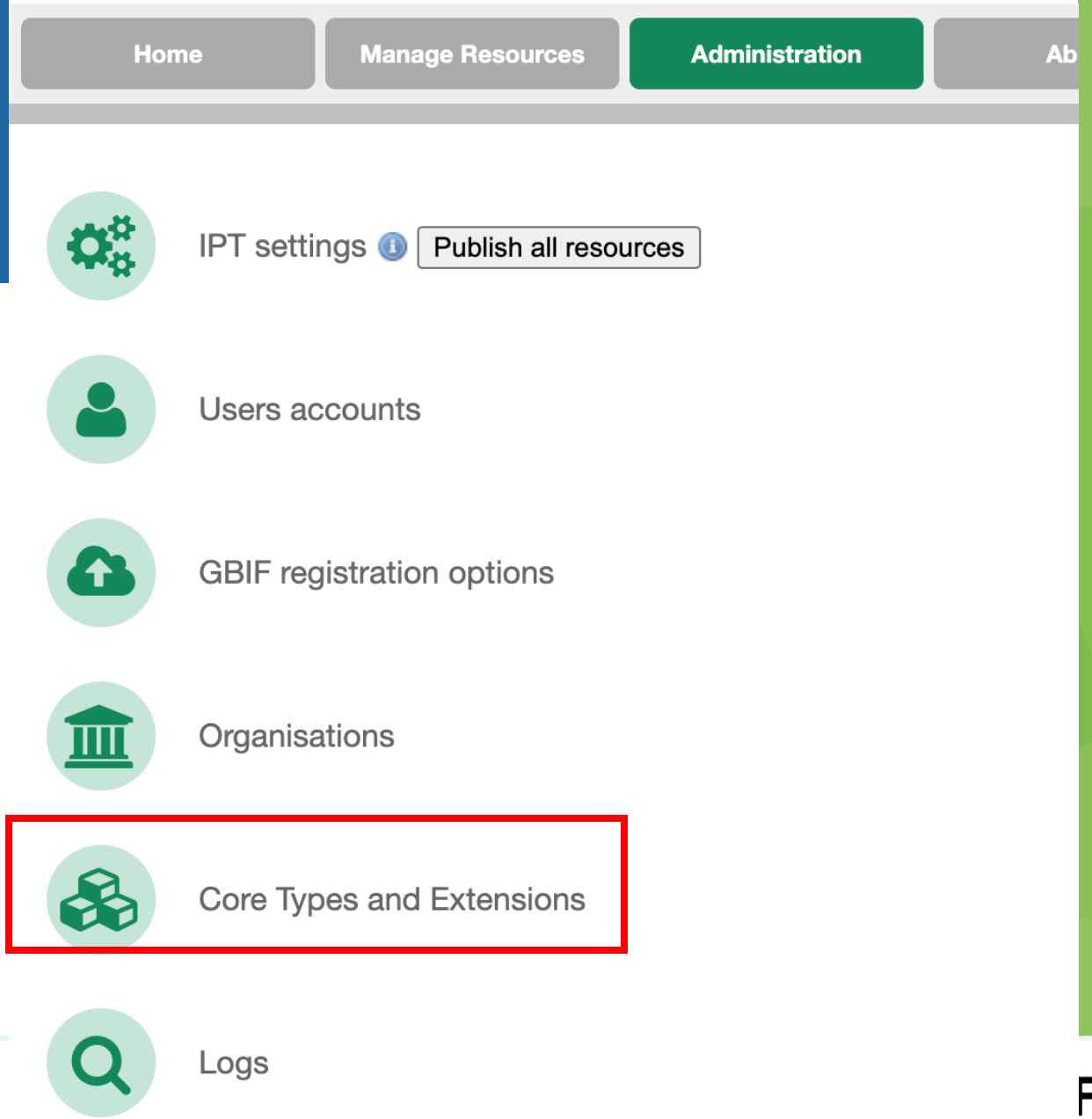
https://dwc.tdwg.org/text/

GBIF

EXTENSIONS IN THE IPT

Extensions can be added to a production or test IPT by an administrator.

Reach out to the TDWG and Darwin community members if you are having trouble finding an extension that suits your needs.



https://tools.gbif.org/dwca-validator/extensions.do

DATA QUALITY REQUIREMENTS

Each core has a set of required and strongly recommended fields.

If the required information is not included, the dataset will not be indexed by GBIF.

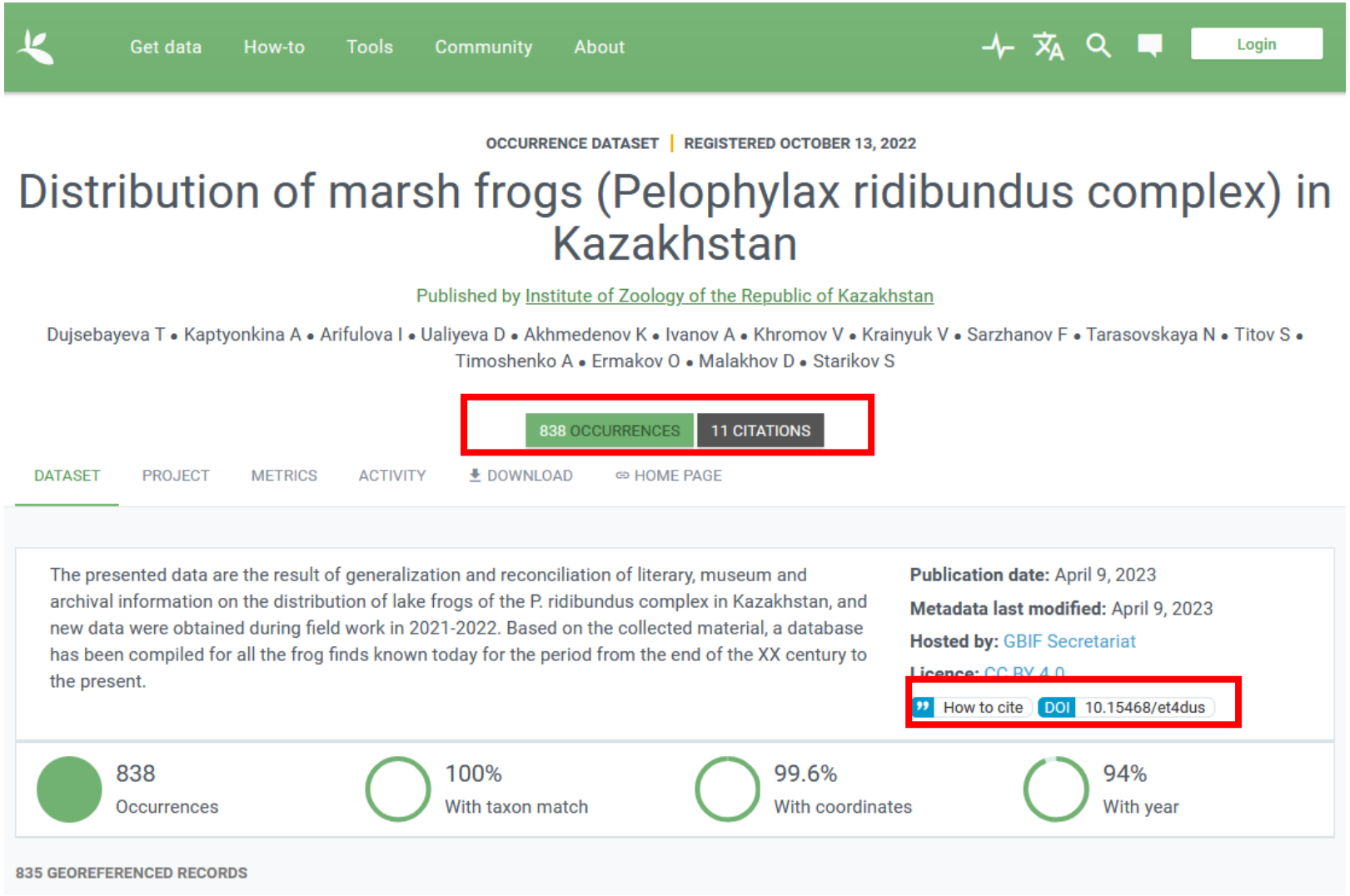
Darwin Core records

Term	Status
occurrenceID	Required
basisOfRecord	Required
scientificName	Required
eventDate	Required
countryCode	Strongly recommended
taxonRank	Strongly recommended
kingdom	Strongly recommended
decimalLatitude & decimalLongitude	Strongly recommended
geodeticDatum	Strongly recommended
coordinateUncertaintyInMeters	Strongly recommended
individualCount, organismQuantity & organismQuantityType	Strongly recommended
informationWithheld	Share if available
dataGeneralizations	Share if available
eventTime	Share if available
country	Share if available

https://www.gbif.org/data-quality-requirements

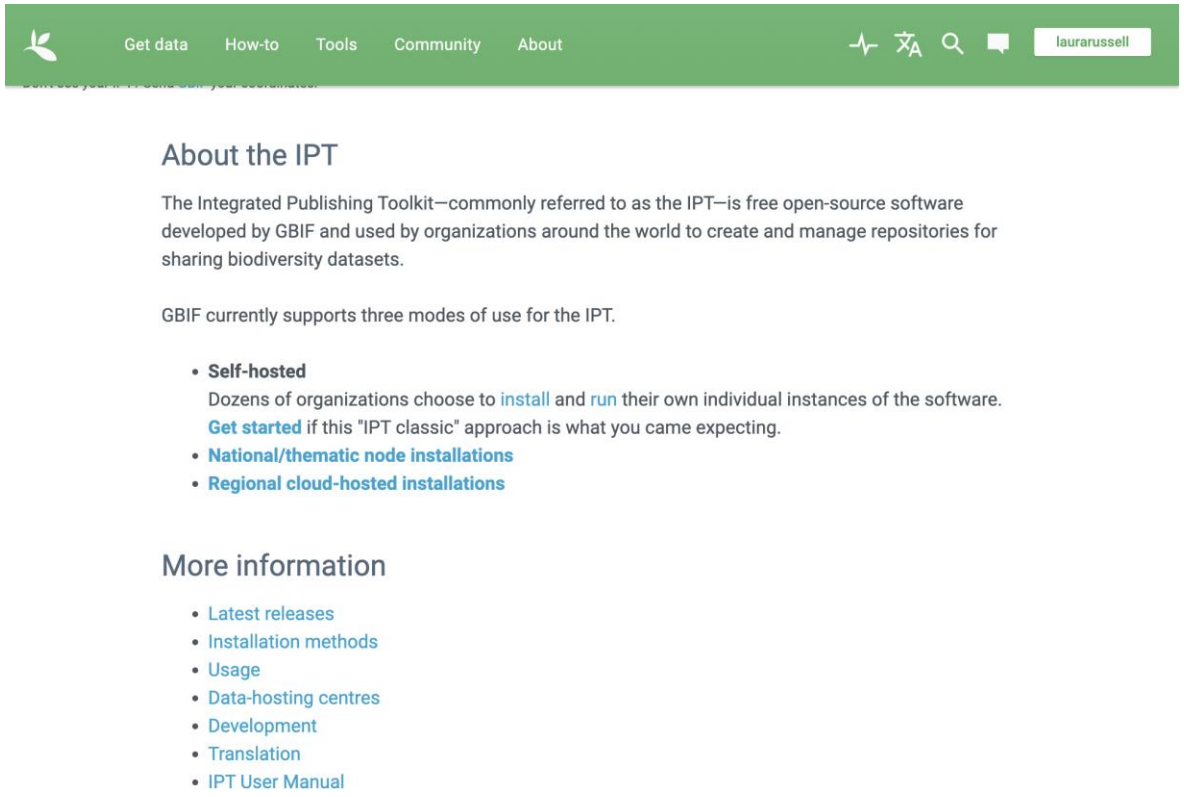
GBIF

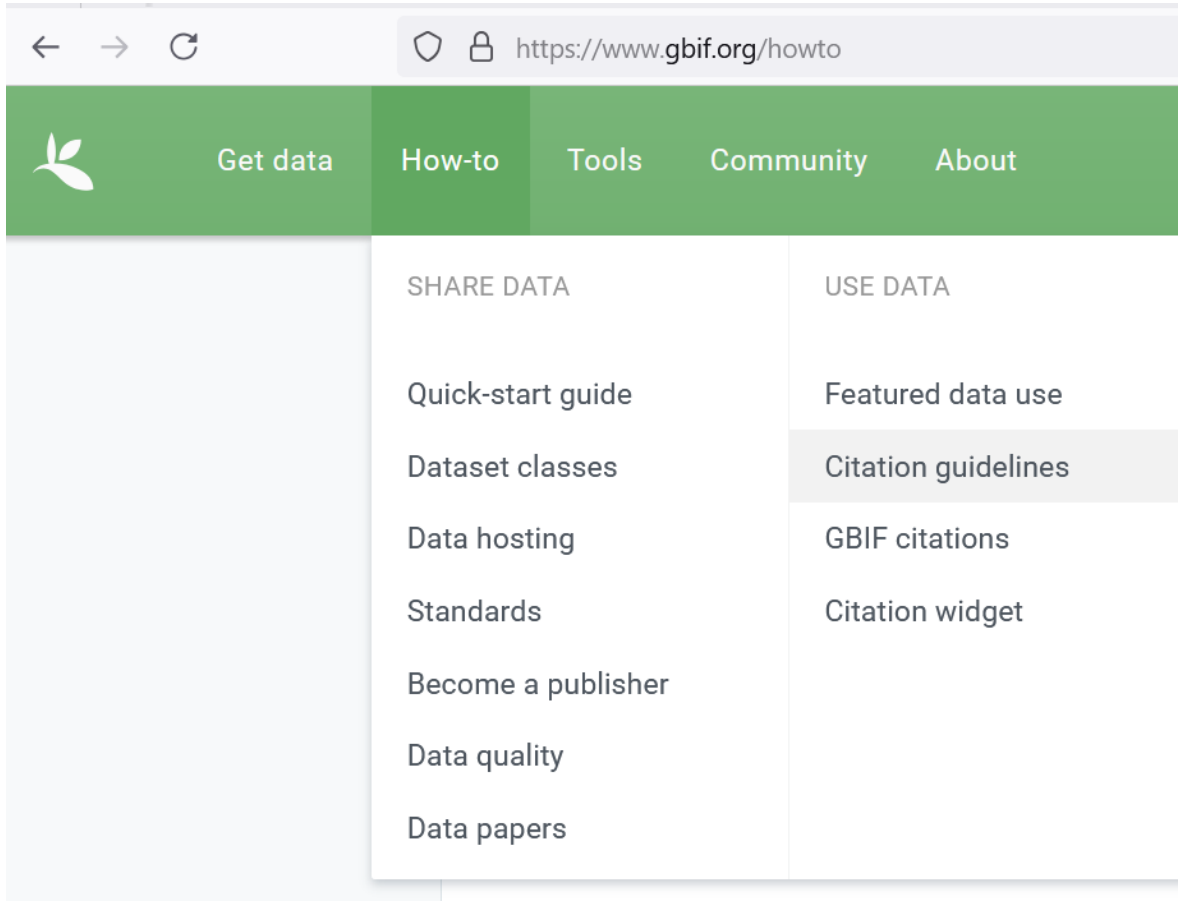
Registered dataset Digital Object Identifier (doi)



https://www.gbif.org/dataset/663e0ec0-7243-48bc-a0dd-55d1ed2224e7

IPT references





https://www.gbif.org/ipt

Incentives for publishing open-access biodiversity data

- Standard formats → Integrated datasets → Improved research
- Supports different types of data
- **Different data sources**: monitoring, collections, eDNA, sensors
- **Free use of infrastructure**
- Effective citation tracking
- Properly credited for your work

https://www.gbif.org/publishing-data#_incentives-for-publishing-open-access-biodiversity-data

Incentives for publishing open-access biodiversity data

- Easier publishing of data papers
- Well established community of practice
  - Online training courses, manuals and guidelines
  - Community Forum
  - Technical support – by email and virtual calls
  - Data Use club

https://www.gbif.org/publishing-data#_incentives-for-publishing-open-access-biodiversity-data

Thank you!

ECA regional support team | eca_support@gbif.org

Oleg Borodin | oborodin@gbif.org

Salza Palpurina | spalpurina@gbif.org

pensoft.net

Biodiversity data papers

Lyubomir Penev
CEO & Founder, Pensoft Publishers
l.penev@pensoft.net

PENSOFT: Science Publisher & Technology Provider

Founded in 1992, based in Sofia, ca. 60 permanent staff

Publisher of 70 academic journals, books & conference materials

Pioneer in semantic publishing in biodiversity & ecology

Coordinator of the EU-funded project BiCIKL: Biodiversity Community Integrated Knowledge Library

Open Access Journals in Biodiversity

RIO
Research Ideas and Outcomes

BioDiscovery
Advanced Open Access Journal in Life Sciences and Medicine

Rethinking Ecology

One Ecosystem
Ecology and Sustainability Data Journal

Why publish data?

- Data authors, data managers and their institutions: credit, citations, registration of priority and “data ownership”
- Science managers: measure impact of published data via citation metrics; proves the Open Science agenda
- Publishers: drive visits and citations of data to their journals
- Data users: facilitate data discovery, use and re-use
- Data aggregators: publication improves data quality!
- Society in general: multiplies the public investments in data collecting and maintenance

Data publishing benefits also AI

To understand the complexity of past, recent and future changes in biodiversity and natural environments

the training and use of AI tools

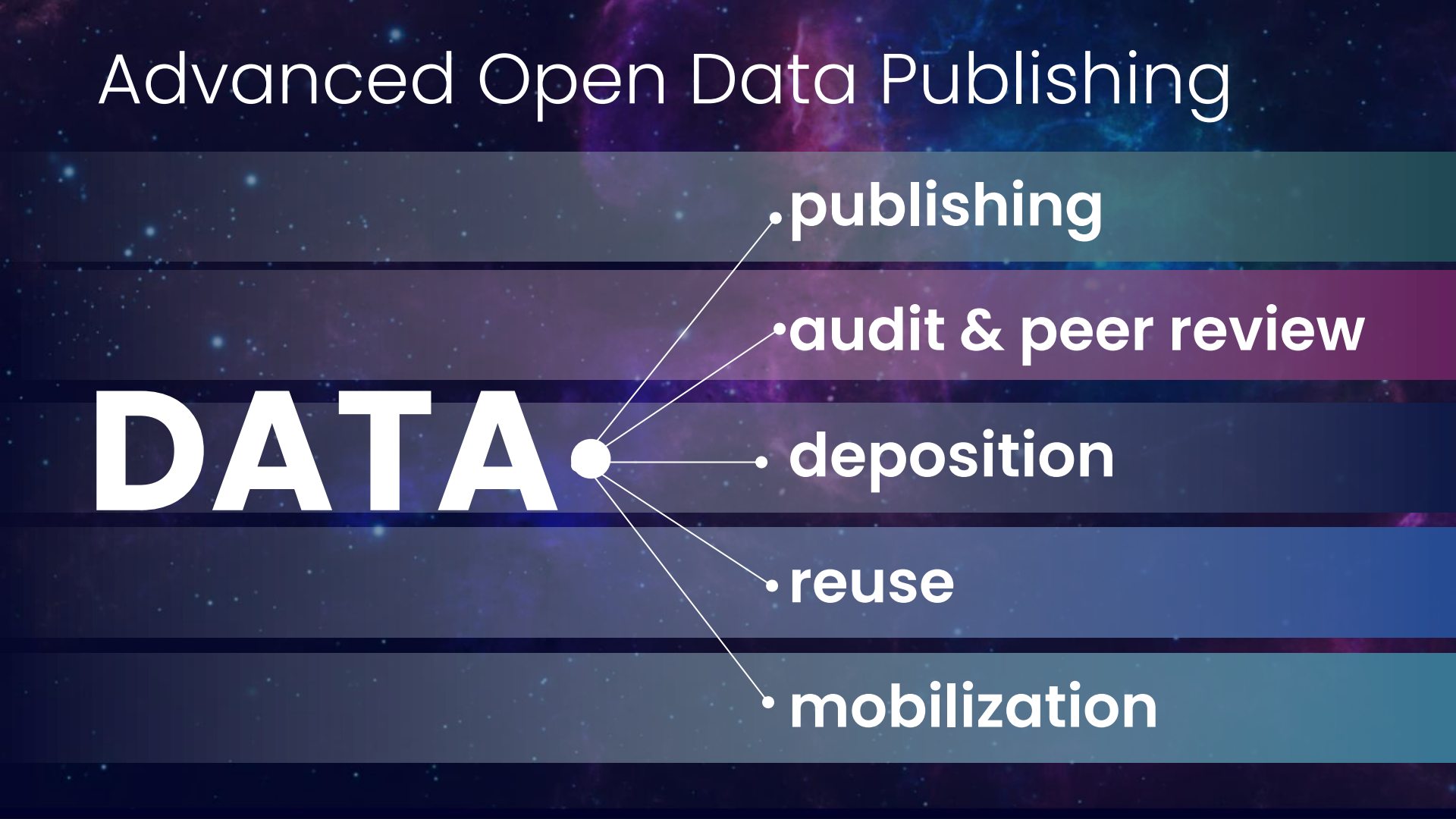
should be based on

adequately curated, semantically structured and interlinked biodiversity data

Means of data publishing

- Standalone data publishing (GBIF, GenBank, etc.)
- Data published together with a research article
    - within the article narrative (specimen records, tables)
    - supplementary file(s)
    - deposited in a repository and linked in the article
- Data published as data papers

Advanced Open Data Publishing



How to publish biodiversity data?

Guidelines
Research Ideas and Outcomes 3: e12431
https://doi.org/10.3897/rio.3.e12431 (28 Feb 2017)
Reviewed v1

Strategies and guidelines for scholarly publishing of biodiversity data

Lyubomir Penev, Daniel Mietchen, Vishwas Shravan Chavan, Gregor Hagedorn, Vincent Stuart Smith, David Shotton, Éamonn Ó Tuama, Viktor Senderov, Teodor Georgiev, Pavel Stoev, Quentin John Groom, David Remsen, Scott C. Edmunds

Abstract

The present paper describes policies and guidelines for scholarly publishing of biodiversity and biodiversity-related data, elaborated and updated during the Framework Program 7 EU BON project, on the basis of an earlier version published on Pensoft's website in 2011. The document discusses some general concepts, including a definition of datasets, incentives to publish data and licenses for data publishing. Further, it defines and compares several routes for data publishing, namely as (1) supplementary files to research articles, which may be made available directly by the publisher, or (2) published in a specialized open data repository with a link to it from the research article, or (3) as a data paper, i.e., a specific, stand-alone publication describing a particular dataset or a collection of datasets, or (4) integrated narrative and data publishing through online import/download of data into/from manuscripts, as provided by the Biodiversity Data Journal

What is a “Data paper”?

The Data paper is:

- A standard, already widely accepted type of scholarly article
- It does not analyse data, it describes data
- Extended “metadata description” of the data
- A key element of Open Science

Data Paper concept for biodiversity (2011)

BMC Bioinformatics

Volume 12 Supplement 15
Data publishing framework for primary biodiversity data

Research | Open Access

The data paper: a mechanism to incentivize data publishing in biodiversity science

Vishwas Chavan † and Lyubomir Penev †

†Contributed equally

BMC Bioinformatics 2011 **12 (Suppl 15)** :S2
https://doi.org/10.1186/1471-2105-12-S15-S2
Published: 15 December 2011

Download PDF

Export citations

Metrics

Article accesses: 16537

Citations: 67 more information

Altmetric Attention Score: 76

Share This Article

Examples of data papers

Data Paper
Biodiversity Data Journal 12: e135019
https://doi.org/10.3897/BDJ.12.e135019 (18 Oct 2024)

Occurrences of Neuroptera and Raphidioptera in some regions in European Russia

Alexander Ruchin, Vladimir Makarkin, Mikhail Esin, Leonid Egorov, Oleg Artaev, Evgeniy Lobachev, Sergey Lukiyanov, Vasilii Anikin, Anatoliy Khapugin, Gennadiy Semishin

Abstract

Background

The document presents an extensive set of data on the occurrence of Neuroptera and Raphidioptera in some regions of European Russia. The results of our own research, as well as scientific collections, have been processed. The data were collected in 17 regions. In our own research, we used different ways to obtain information, which allowed us to collect extensive material for the dataset. This dataset provides valuable information about the biodiversity of Neuroptera and Raphidioptera, the abundance of each taxon collected and the time of taxon collections.

New information

Our dataset contains up-to-date information on the occurrence of Neuroptera and Raphidioptera in

XML PDF

Contents | Article Info | Cite | Metrics | Comment | Related
Figs | Tabs | Taxa | Refs | Cited | Nanopubs

Article metadata
Introduction
General description
Sampling methods
Geographic coverage
Taxonomic coverage
Temporal coverage
Usage licence
Data resources
Additional information
Observers
Acknowledgements
References

Data Paper
Biodiversity Data Journal 12: e117169
https://doi.org/10.3897/BDJ.12.e117169 (16 May 2024)

The InBIO Barcoding Initiative Database: DNA barcodes of Portuguese moths

Sónia Ferreira, Martin F. V. Corley, João Nunes, Jorge Rosete, Sasha Vasconcelos, Vanessa A. Mata, Joana Veríssimo, Teresa L Silva, Pedro Sousa, Rui Andrade, José Manuel Grosso-Silva, Catarina J. Pinho, Cátia Chaves, Filipa MS Martins, Joana Pinto, Pamela Puppo, Antonio Muñoz-Mérida, John Archer, Joana Pauperio, Pedro Beja

Abstract

Background

The InBIO Barcoding Initiative (IBI) Dataset - DS-IBILP08 contains records of 2350 specimens of moths (Lepidoptera species that do not belong to the superfamily Papilionoidea). All specimens have been morphologically identified to species or subspecies level and represent 1158 species in total. The species of this dataset correspond to about 42% of mainland Portuguese Lepidoptera species. All specimens were collected in mainland Portugal between 2001 and 2022. All DNA extracts and over 96% of the specimens are deposited in the IBI collection at CIBIO, Research Center in Biodiversity and Genetic Resources.

New information

XML PDF

Contents | Article Info | Cite | Metrics | Comment | Related
Figs | Taxa | Data | Refs | Cited | Nanopubs

Article metadata
Introduction
General description
Project description
Sampling methods
Geographic coverage
Taxonomic coverage
Temporal coverage
Collection data
Usage licence
Data resources
Acknowledgements
References
Supplementary files

Data Paper
Biodiversity Data Journal 5: e11764
https://doi.org/10.3897/BDJ.5.e11764 (21 Mar 2017)

A global map of saltmarshes

Chris J Mcowen, Lauren V Weatherdon, Jan-Willem Van Bochove, Emma Sullivan, Simon Blyth, Christoph Zockler, Damon Stanwell-Smith, Naomi Kingston, Corinne S Martin, Mark Spalding, Steven Fletcher

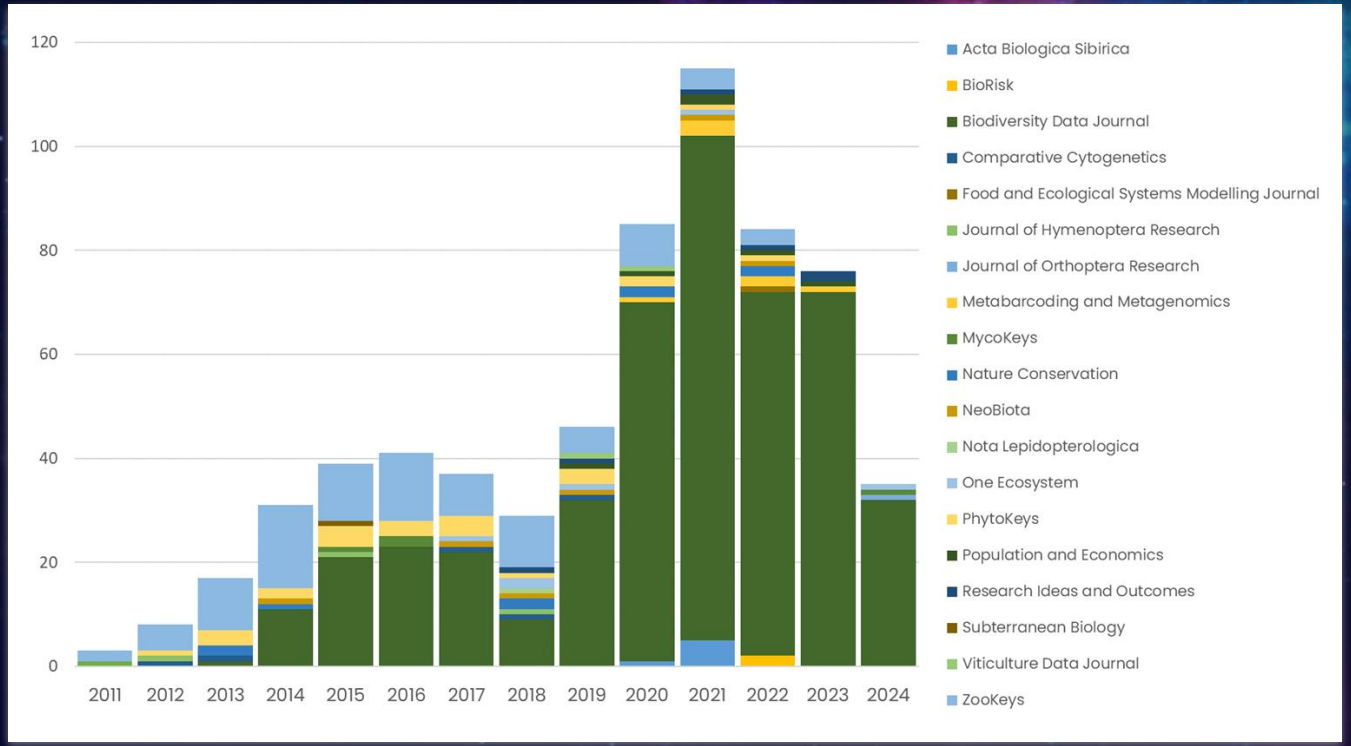
Abstract

Background

Saltmarshes are extremely valuable but often overlooked ecosystems, contributing to livelihoods locally and globally through the associated ecosystem services they provide, including fish production, carbon storage and coastal protection. Despite their importance, knowledge of the current spatial distribution (occurrence and extent) of saltmarshes is incomplete. In light of increasing anthropogenic and environmental pressures on coastal ecosystems, global data on the occurrence and extent of saltmarshes are needed to draw attention to these critical ecosystems and to the benefits they generate for people. Such data can support resource management, strengthen decision-making and facilitate tracking of progress towards global conservation targets set by multilateral environmental agreements, such as the Aichi Biodiversity Targets of the United Nations' (UN's) Strategic Plan for Biodiversity 2011-2020, the Sustainable Development Goals of the UN's 2030 Agenda for Sustainable Development and the Ramsar Convention.

New information

Data papers in Pensoft's journals



More than

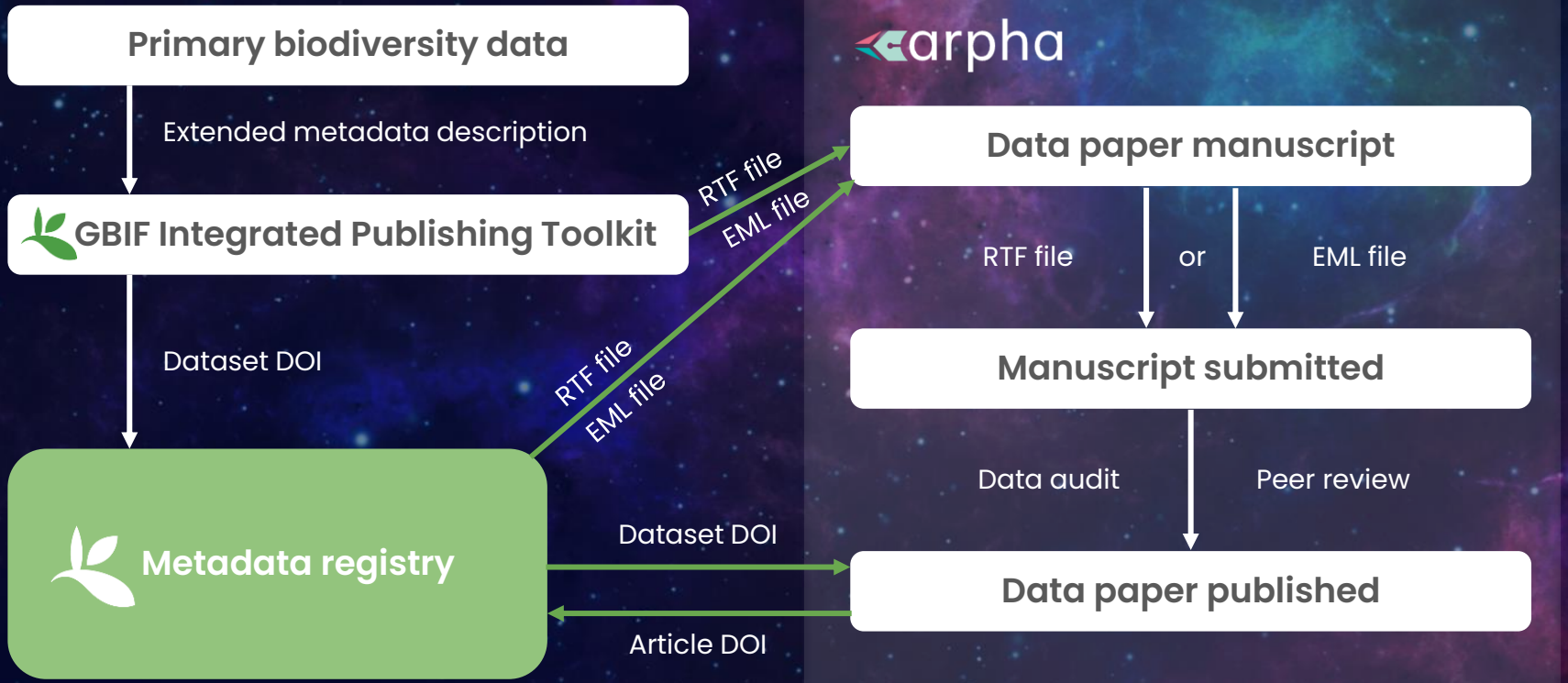
700

Data papers published in Pensoft's journals

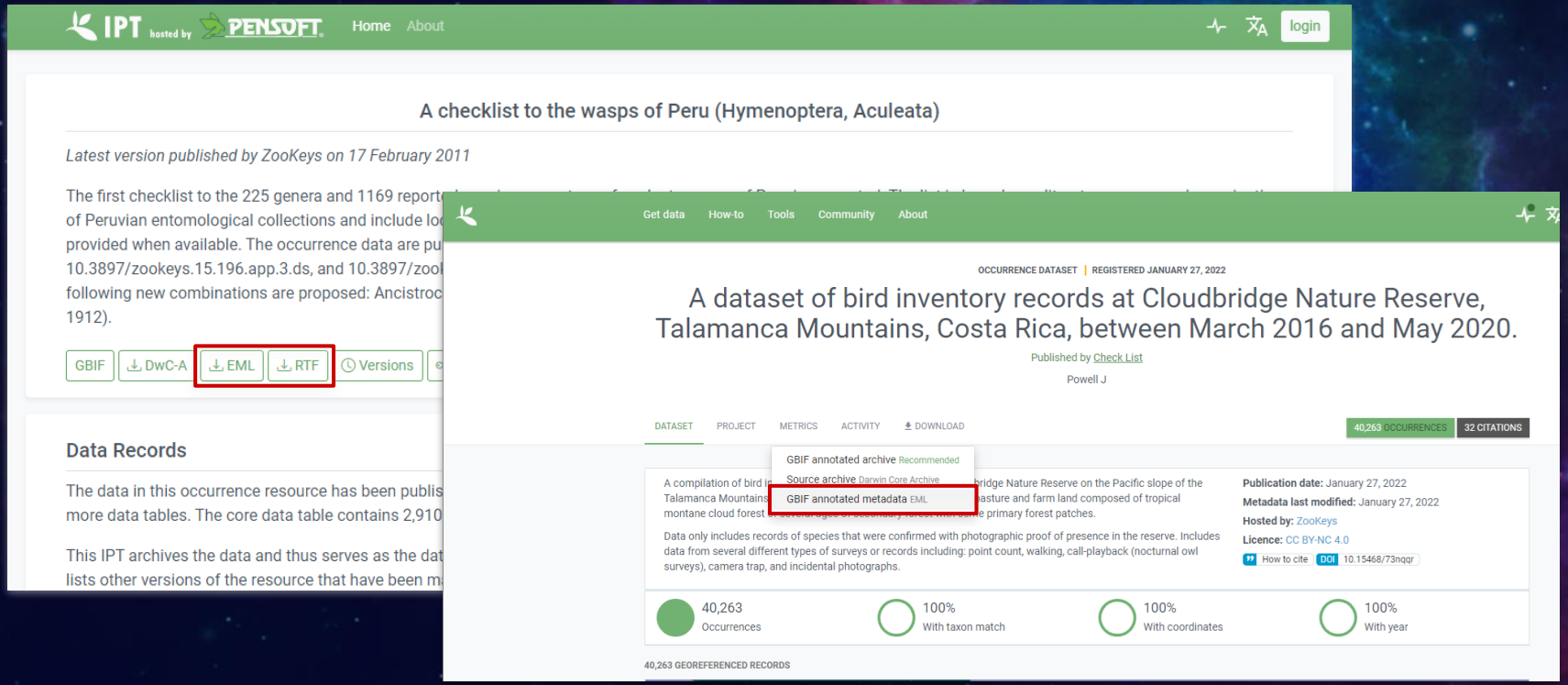
Publishing GBIF data papers with Pensoft

Improving data quality

Data Paper workflows



Download EML or RTF metadata file



Upload the GBIF EML file and create a data paper manuscript

Data audit & peer review

Improving data quality

Author-performed data check

A peer-reviewed open-access journal
Biodiversity Data Journal
Making your data count! ISSN 1314-2828 (online)

CHECKLIST

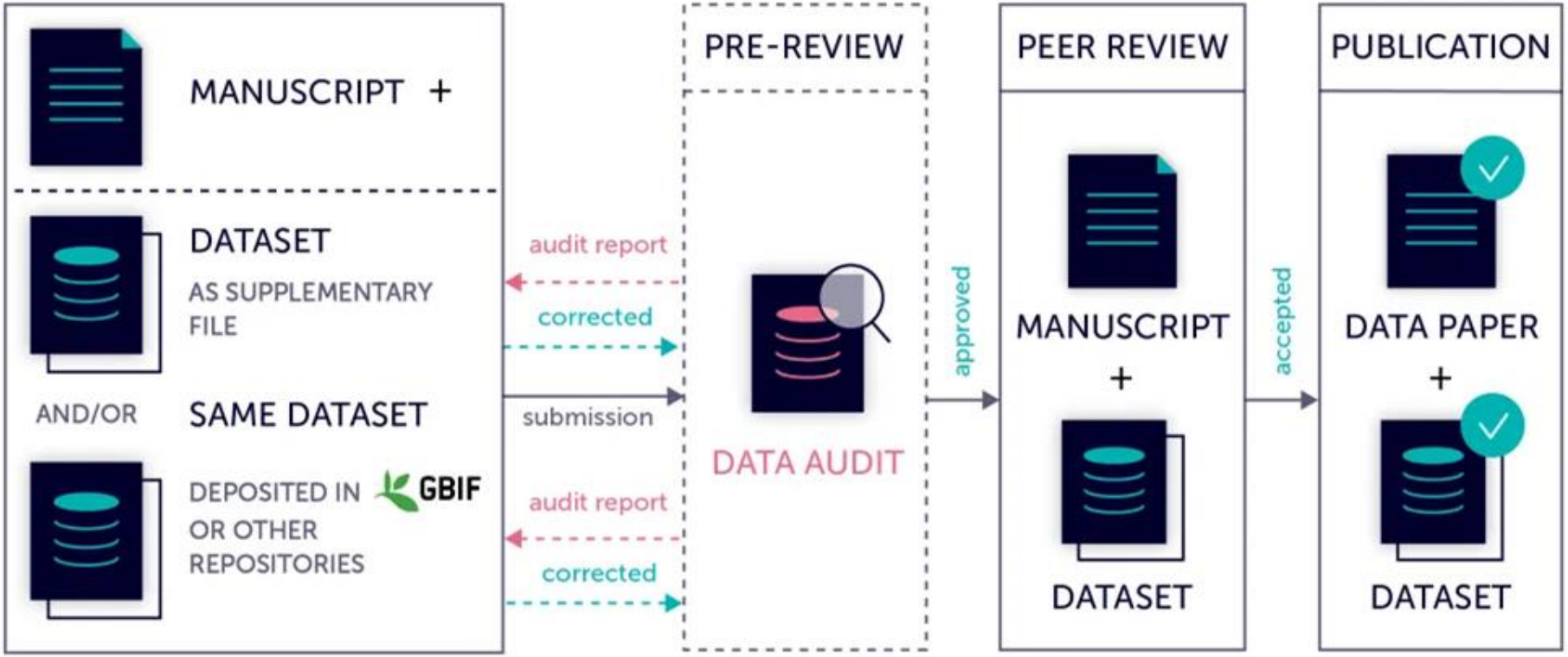
Characters

- The dataset is UTF-8 encoded
- The only characters used that are not numbers, letters or standard punctuation, are tabs and whitespaces
- Each character has only one encoding in the dataset
- No line breaks within data items
- No field-separating character within data items (tab-separated data preferred)
- No "?" or replacement characters in place of valid characters
- No Windows carriage returns
- No leading, trailing, duplicated or unnecessary whitespaces in individual data items

Records

- No broken records, i.e. records with too few or too many fields
- No blank records

Editor-performed data check



Data audit report: list of errors

- inappropriately used fields
- non-compliance with the Darwin Core recommendations
- pseudo-duplicates
- data inconsistency

(7) *municipality* has "_." for EC42F49A-68D5-4504-8F9E-0010859712A1.

(8) *locality* needs cleaning for the many pseudo-duplicates, e.g.

2	casco urbano, avda. del Brillante, nº 187, carril de la Huerta de los Arcos
7	casco urbano, avda. del Brillante, nº 187, carril Huerta de los Arcos
7	casco urbano, avda. del Brillante, nº 187, Carril Huerta los Arcos

and the many unnecessarily quoted entries, e.g.

"casa ""Rompealbardas"""
"""Villa Carmen"", ""El Calvario"""

Also, *locality* is "_" for CC465E40-9868-4B01-8D2B-5CB9AC747674 and 8547AA0D-682B-4848-B31F-0399427D51FA

(9) *decimalLatitude* errors:

1	30S266977.44
1	37,91560º
1	40.9449º
1	41.9425N

Also, several entries have too many significant figures and should be rounded off, e.g. "37.0233172796695"

Data audit report: recommendations

Data audit for technical evaluation of

***Vascular plants dataset of the COFC herbarium (University of Cordoba, Spain)* (associated GBIF dataset)**

Downloaded on 2019-06-19 from https://www.gbif.org/dataset/837c0162-f762-11e1-a439-00145eb45e9a

Dr Robert Mesibov (robert.mesibov@gmail.com; https://www.datafix.com.au)
2019-06-20

About this evaluation

Pensoft does a technical evaluation of the dataset (or datasets) referred to in the data pap
problems, the data paper manuscript is referred to reviewers. If the dataset has major prot
the dataset has been corrected.

To see what features of a dataset are checked in a technical evaluation, please go to

https://zookeys.pensoft.net/about#DataQualityChecklistandRecommendations

Please note that Pensoft does not check the details of the *content* of a dataset, for exampl
scientific name, or whether the correct latitude/longitude is given for a locality.

Recommendation. The dataset associated with the manuscript has been proce
go on to review. However, there are many data problems in the GBIF upload, an
problems be fixed and the data re-uploaded to GBIF for processing. The problen
field in the field order in the dataset.

Many of the problems are not trivial and are causing data loss. For example, the
4360-86C7-5C9D483D6DAE is "30S266977.44". GBIF has rejected the location
(https://www.gbif.org/occurrence/2235670578).

Recommendation. The dataset associated with the manuscript has been processed by GBIF and the data paper could go on to review. However, there are many data problems in the GBIF upload, and I recommend to the authors that these problems be fixed and the data re-uploaded to GBIF for processing. The problems are detailed below by Darwin Core field in the field order in the dataset.

Many of the problems are not trivial and are causing data loss. For example, the decimalLatitude in FF92A873-601C-4360-86C7-5C9D483D6DAE is "30S266977.44". GBIF has rejected the location as "Coordinate invalid" (https://www.gbif.org/occurrence/2235670578).

In addition, the number of records in the dataset uploaded to GBIF (**verbatim.txt** in the user download) does not always agree with the number of records given in the data paper:

Family	**Data paper**	**verbatim.txt**
Asteraceae	8625	8625
Fabaceae	7929	7929
Poaceae	6324	5513 (as stated in paper, without 811 *Festuca* records)
Lamiaceae	3105	3087
Caryophyllaceae	2156	2156
Plantaginaceae	2023	750
Brassicaceae	1851	1852
Apiaceae	1707	1707
Ranunculaceae	1319	1318
Boraginaceae	1111	1289

Genus	**Data paper**	**verbatim.txt**
Centaurea	1538	1537
Trifolium	1406	1406
Euphorbia	768	756

Data published in GBIF by the journal

Taxonomy & Inventories
Biodiversity Data Journal 12: e124006
https://doi.org/10.3897/BDJ.12.e124006 (25 Apr 2024)

A new species of *Otacilia* Thorell, 1897 (Araneae, Phrurolithidae) from Yintiaoling National Nature Reserve, Chongqing, China

Changbin Zheng, Yannan Mu

Abstract

Background

Phrurolithidae is a family of spiders with 395 species belonging to 26 genera distributed worldwide, of which 205 species belong to 17 genera was recorded in China.

New information

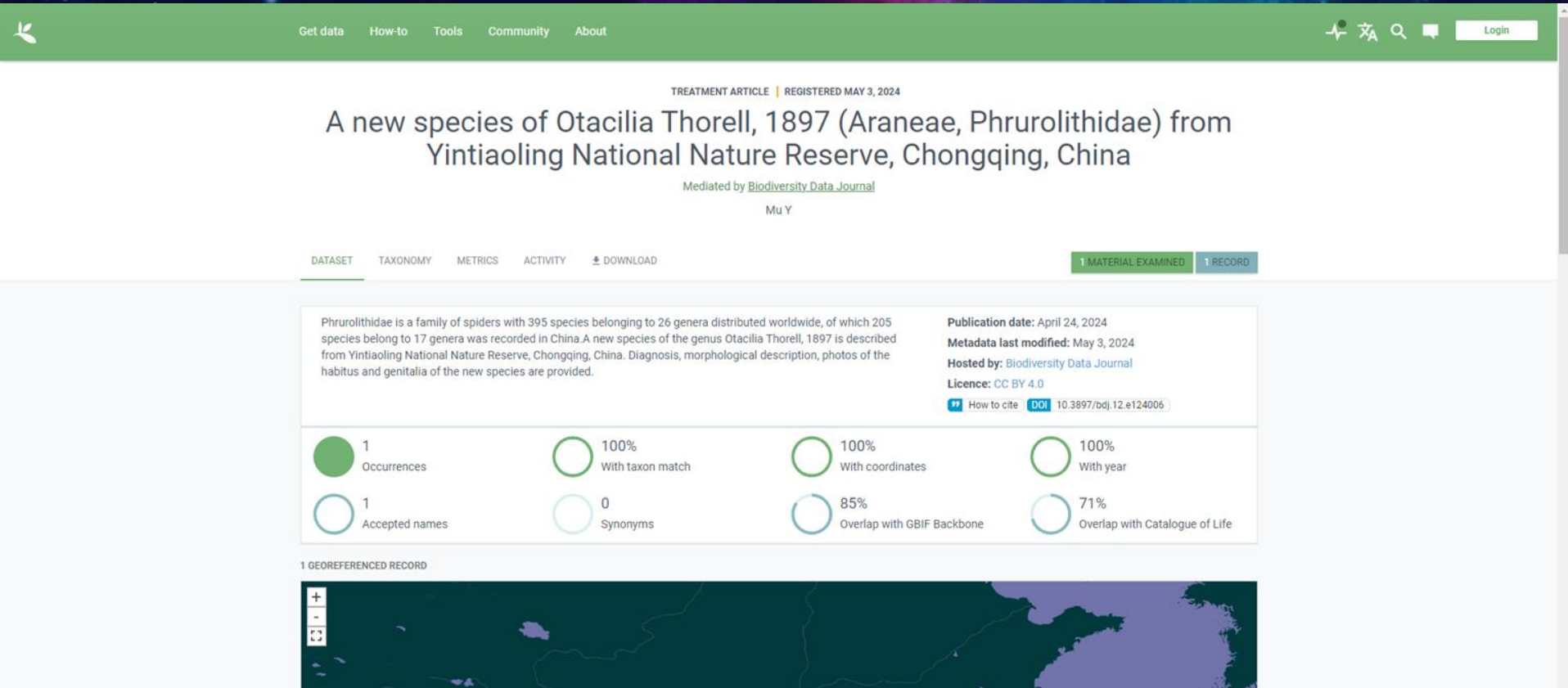
Tables and Figures, if present, can be downloaded from the article.

Explore this dataset on GBIF

Download all occurrences as Darwin Core Archive

Download all treatments as Darwin Core Archive

Data visualised on GBIF



Taxon descriptions and specimen records on GBIF

Classification

Select a species

You are browsing: A new species of Otacilia Thorell, 1897 (Araneae, Phrurolithidae) from Yintiaoling National Nature Reserve, Chongqing, China

Kingdom	Animalia
Phylum	Arthropoda
Class	Arachnida
Order	Araneae
Family	Phrurolithidae
Genus	*Otacilia*
Species	*Otacilia wuxi* Zheng & Mu

No children

SPECIES | ACCEPTED

Otacilia wuxi Zheng & Mu

In: Zheng C, Mu Y (2024) A new species of Otacilia Thorell, 1897 (Araneae, Phrurolithidae) from Yintiaoling National Nature Reserve, Chongqing, China. Biodiversity Data Journal 12: e124006. https://doi.org/10.3897/BDJ.12.e124006

Mediated through: Biodiversity Data Journal

TREATMENT VERBATIM SOURCE

Male: total length 5.01, carapace 2.19 long, 1.91 wide; abdomen 2.59 long, 1.67 wide. Eye sizes and interdistances: AME 0.14, ALE 0.15, PME 0.11, PLE 0.13, AME–AME 0.04, AME –ALE 0.02, PME–PME 0.16, PME–PLE 0.09, ALE–PLE 0.15. MOA 0.37 long, anterior width 0.30, posterior width 0.42. Clypeal height 0.19. Chelicerae with three promarginal and eig ht retromarginal teeth. Measurements of legs: I 8.86 (2.34+3.44+2.00+1.08), II 7.05 (1.87 +2.59+1.55+1.04), III 6.18 (1.70+1.93+1.58+0.97), IV 9.46 (2.52+2.95+2.62+1.37). Spinati on: tibia I pv 8 rv 8, tibia II pv 7 rv 7, metatarsus I pv 4 rv 4, metatarsus II pv 3 rv 3. Legs y ellow. Carapace yellow, with several indistinct shapes resembling flowing water droplets beside fovea. Abdomen yellow, with a small, thin dorsal scutum and irregular black patter n anterior and four black chevron stripes posterior (Fig. 1A).

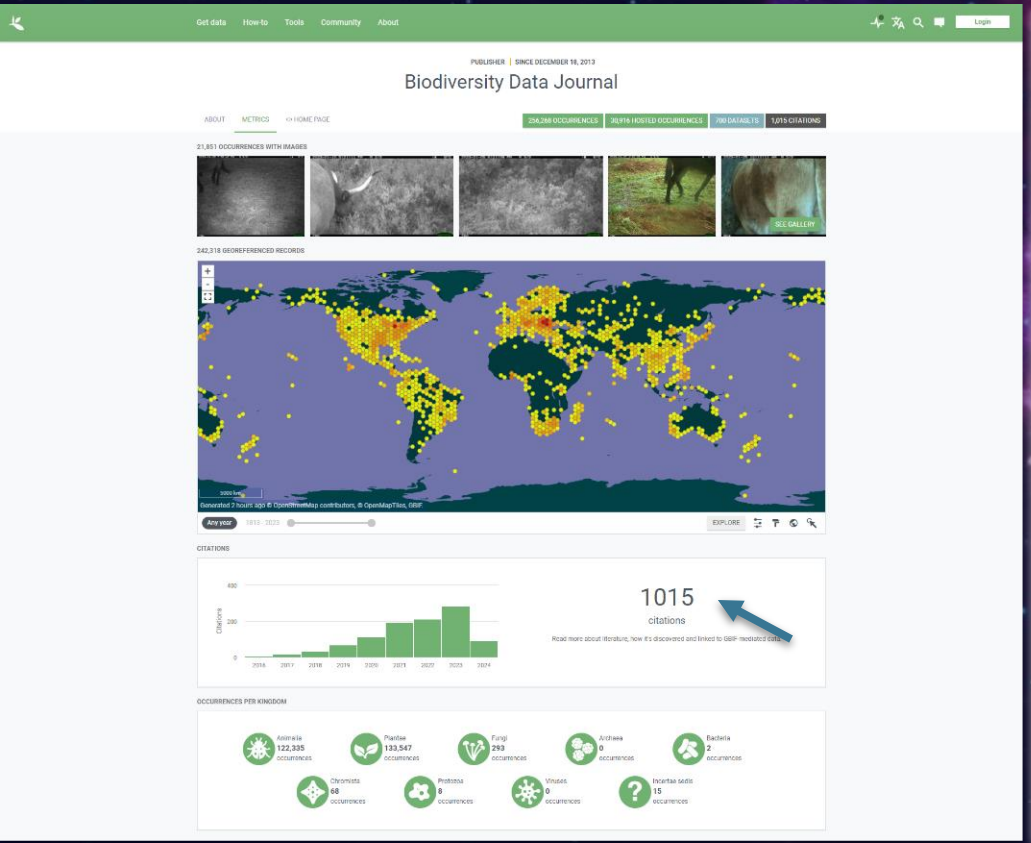
Palp. Femoral apophysis high, located at middle part of femur, well-developed (Fig. 1C an d D). Dorsal tibial apophysis long and large, strongly curved as semi-elliptic, base wide, ta pering from middle to tip (Fig. 1C and D); prolateral tibial apophysis distinct (Fig. 1B). Teg ulum bean-shaped, wider than cymbium; tegular apophysis semicircular. Conductor mem branous (Fig. 1B). Sperm duct obvious, tapering from retrolateral of tegulum to embolus. Embolus long, needle-like, strongly curved retrolaterally from basal part (Fig. 1B).

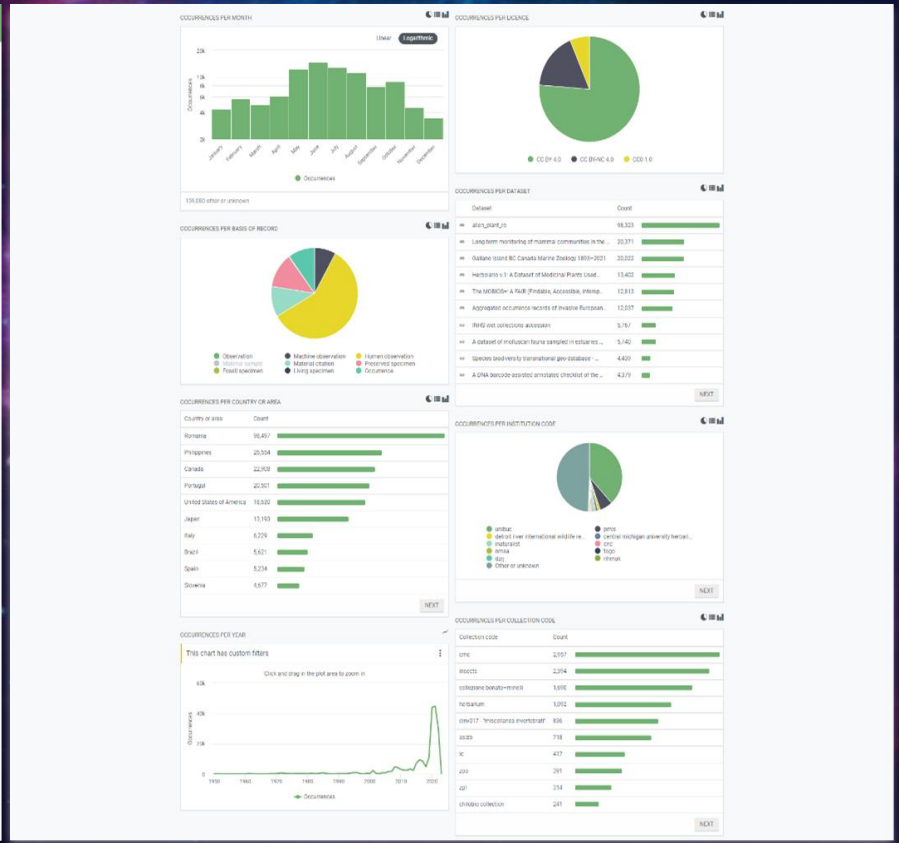
Female: unknown.

FIGURES

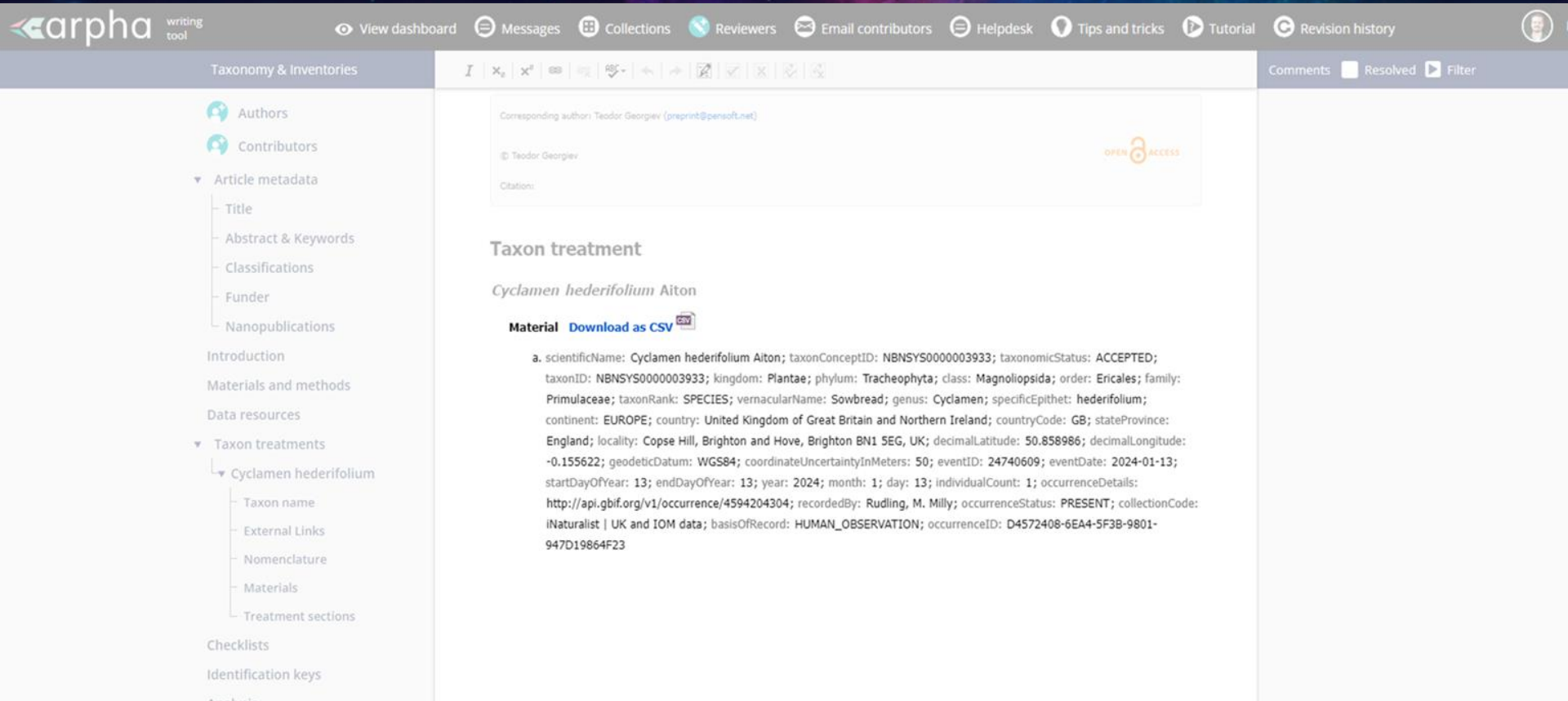
Figure 1
Otacilia wuxi sp. nov., male, holotype. **A** habitus; **B** left palp, ventral view; **C** same, prolateral view; **D** same, retrolateral view. Abbreviations: C—conductor; DTA—dorsal tibial apophysis; E—embolus; FA—femoral

Datasets from the Biodiversity Data Journal

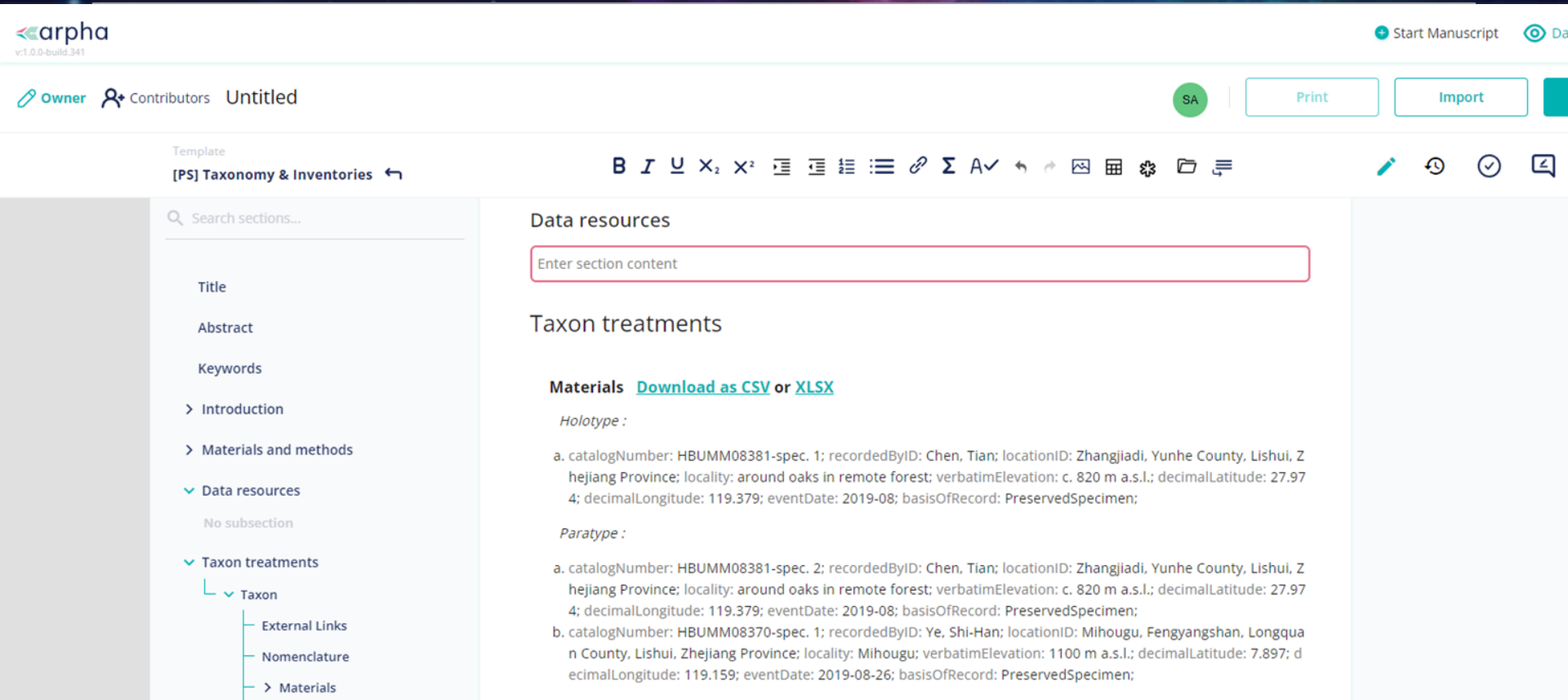




Import of occurrence records from GBIF into manuscripts



Parsing occurrence records using AI



Data mobilization

Filling the gaps

Special GBIF Data papers collections in BDJ

Biota of Russia
(2020-2021)

Papers published: **59**
Total pages: **1204**
Unique views: **130627**
Total views: **202481**

Biota of Northern Eurasia
(2022-2023)

Papers published: **11**
Total pages: **202**
Unique views: **16991**
Total views: **25287**

Soil biodiversity
(2023-2024)

Papers published: **3**
Total pages: **86**
Unique views: **4009**
Total views: **5644**

Collection of data papers on the biota of Central Asia?

More than a decade together GBIF & Pensoft

Incentivizing data publishing

Improving data quality

Gathering more data

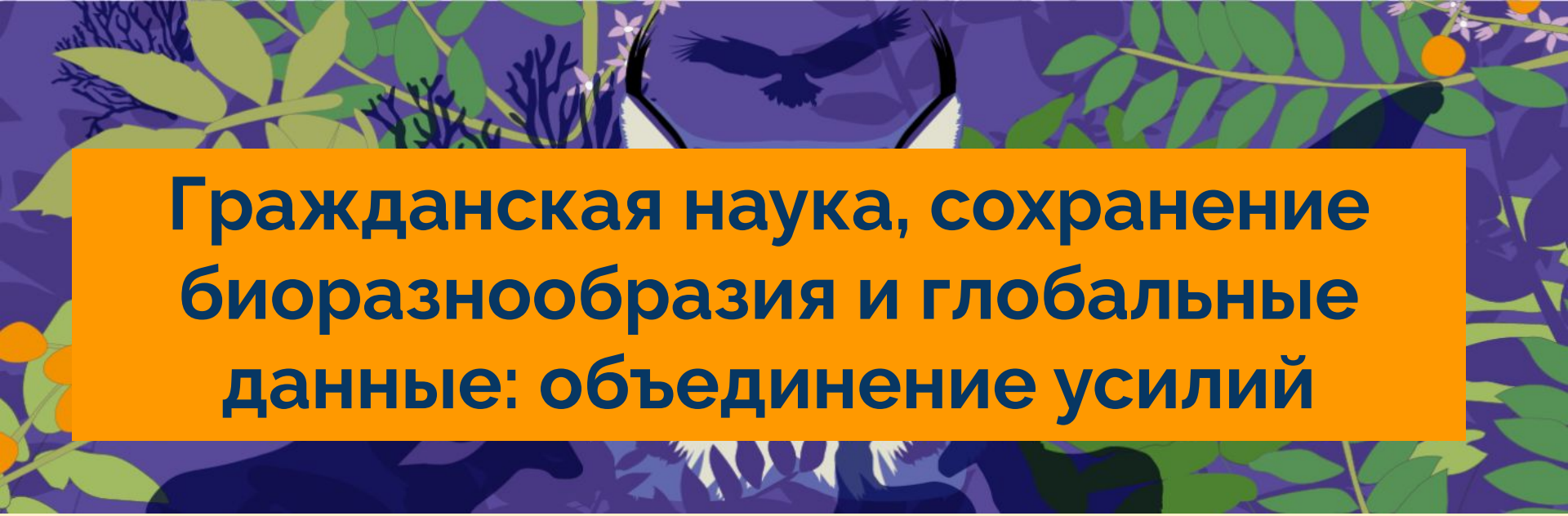
Saving time, minimizing errors

Filling the gaps

Share your data through GBIF!

Publish its metadata as data papers!

Lyubomir Penev,
l.penev@pensoft.net
Pensoft Publishers
pensoft.net



Гражданская наука, сохранение биоразнообразия и глобальные данные: объединение усилий

Александр Дубынин

Институт ботаники и фитоинтродукции

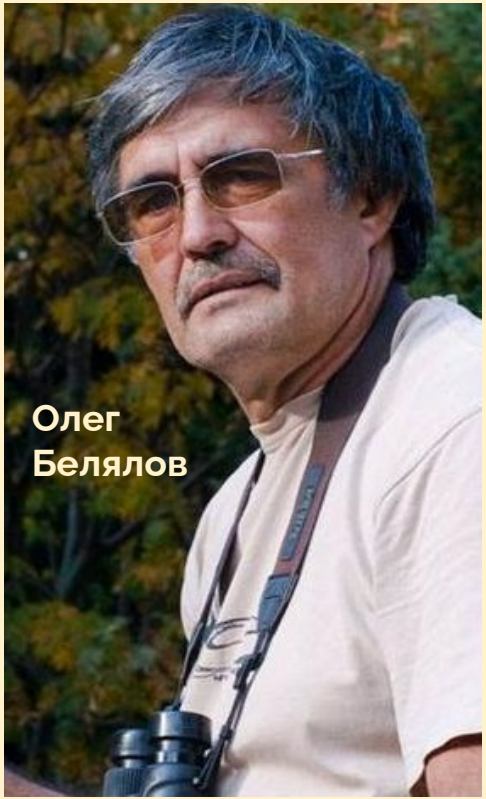
МЕЖДУНАРОДНЫЙ СИМПОЗИУМ «ДАННЫЕ О БИОРАЗНООБРАЗИИ ГОР И ПУСТЫНЬ ЕВРАЗИИ», 18–19 НОЯБРЯ 2024 г., АЛМАТЫ, КАЗАХСТАН

Необходимые пояснения

Гражданская наука (citizen science, community science), или научное волонтерство — концепция проведения научных исследований с привлечением широкого круга научных волонтеров.

"Citizen scientist" — это исследователь-любитель, человек, который вносит вклад в научные исследования на добровольной основе.

Биоразнообразие — разнообразие жизни во всех её проявлениях, а также показатель сложности биологической системы, разнокачественности её компонентов. Выделяют генетическое разнообразие (разнообразие генов и их вариантов — аллелей), видовое разнообразие (разнообразие видов в экосистемах) и экосистемное разнообразие (разнообразие самих экосистем).



Разнообразие гражданской науки

астрономия

технологии

статистика

города

архитектура

культура

карты

фермерство

связь с природой

химия воды

биоразнообразие

жилище

география

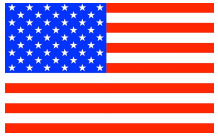
физика

Вселенная

климат

экстремальная погода

- **Zooniverse**
  - **Более 100 активных проектов** в областях астрономии, экологии, гуманитарных наук и др.
  - **Сообщество**: свыше **2 миллионов** зарегистрированных пользователей по всему миру.
- **SciStarter**
  - **Более 3 тысяч проектов** гражданской науки, доступных по всему миру.
  - **Особенности**: поиск проектов по теме, местоположению, навыкам и времени участия.
- **eBird**
  - **Свыше 1 миллиарда** записей наблюдений птиц.
  - **Участники**: сотни тысяч орнитологов-любителей и профессионалов.
- **Foldit**
  - **Тысячи пользователей** помогают решать задачи по сворачиванию белков через онлайн-игру.
  - **Научные достижения**: вклад в открытие новых белковых структур, важных для медицины.
- **Globe at Night**
  - **Более 200 тысяч наблюдений** уровня светового загрязнения со всего мира.
  - **Цель**: понимание и снижение воздействия светового загрязнения на ночное небо и экосистемы.



США: 502 проекта

citizenscience.gov

About Catalog Toolkit Blog Search

Helping federal agencies accelerate innovation through public participation.

Learn more

catalog

Explore Projects

This searchable database provides a government-wide listing of citizen science and crowdsourcing projects

community

Join Us

There are two primary groups within the federal government working collaboratively to advance the use of

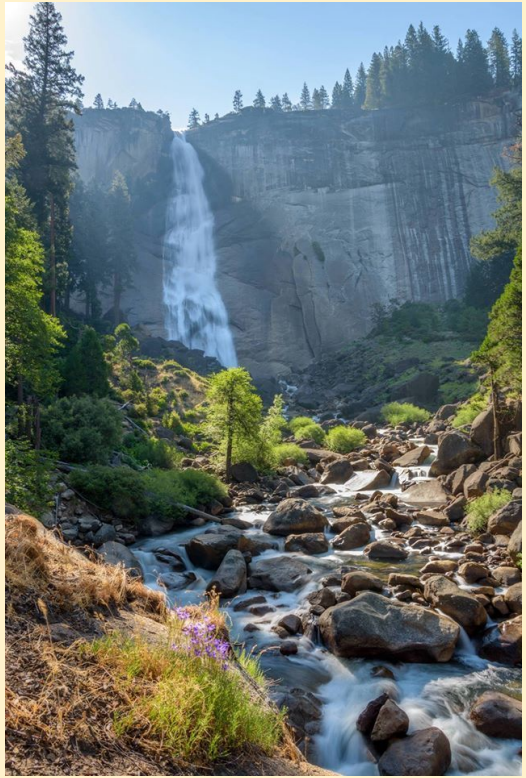
toolkit

Plan Your Projects

The Toolkit provides five basic process steps for planning, designing and carrying out a crowdsourcing or

Факт 1. Вклад научных волонтеров в США сопоставим с госфинансированием науки

- ★ **Элинор Дженкинс Теобальд и ее коллеги** провели количественный обзор гражданской науки, связанной с биоразнообразием, чтобы определить, могут ли данные, собранные в рамках этих проектов, эффективно использоваться, и как они в настоящее время используются в исследованиях биоразнообразия.
- ★ **388 проектов**, в основном реализуемых в США, 1,3 миллиона добровольцев, их вклад **2,5 миллиардов долларов в натуральной форме ежегодно**.
- ★ **Вывод**: укрепление связей между профессиональными и непрофессиональными участниками научного процесса позволит лучше использовать этот большой ресурс данных для понимания и устранения последствий глобальных изменений для биоразнообразия.

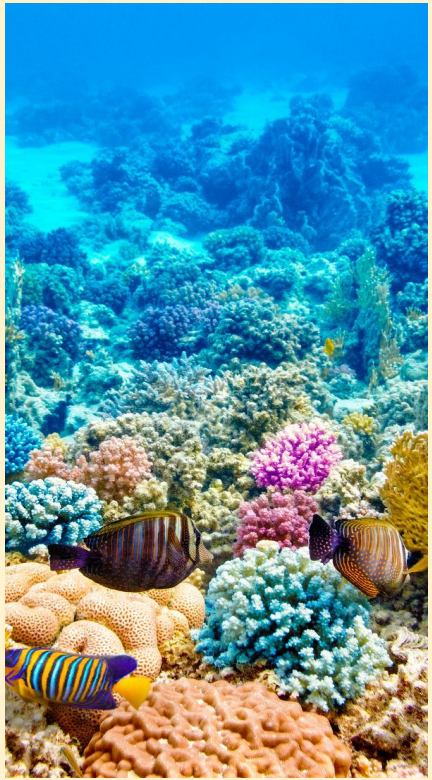


Факт 2. Проекты гражданской науки вносят большой вклад в образование

- ★ **Мария Питер и ее коллеги** исследовали роль проектов CS как формата образования в области окружающей среды и устойчивого развития, а также в естественнонаучном образовании.
- ★ Онлайн-опрос **1160 добровольцев**, участников CS в **63 проектах BDCS** в Европе, Австралии и Новой Зеландии.
- ★ **Эффект участия**: высокий потенциал! (1) **увеличение знаний, самоэффективности, интереса и мотивации** оказалось более выраженным в отношении окружающей среды, а не науки, (2) высокий **прирост навыков сбора данных**, (3) здоровье и благополучие, удовольствие, чувство удовлетворения, усиление связи с людьми и природой, а также более пессимистичный взгляд на будущее окружающей среды (пессимист — это хорошо информированный оптимист!).

Факт 3. Приоритет в сборе данных: распределение видов и оценка численности

- ★ **Марк Чандлер и его коллеги** оценили проекты CS на предмет их вклада в основные переменные биоразнообразия **(Essential Biodiversity Variables/EBV)**.
- ★ **Вывод**: существующие проекты CS предоставляют значительные по охвату данные о распределении видов и численности популяций, фенологии, первичной и вторичной продуктивности экосистем.
- ★ **Мониторинг птиц, чешуекрылых и растений проводится повсеместно**, в то время как другие таксоны вызывают большой интерес только в отдельных регионах (грибы, амфибии, рептилии и таксоны коралловых рифов). Большинство проектов CS находятся в Европе, Северной Америке, Южной Африке, Индии и Австралии (Северная и Центральная Азия, Южная Америка отстают).



Global Biodiversity Information Facility (GBIF)

- ★ **Крупнейший агрегатор данных** о биоразнообразии планеты
- ★ Это **международная сеть и инфраструктура** данных, финансируемая правительствами стран мира и направленная на предоставление любому человеку в любом месте открытого доступа к данным обо всех видах жизни на Земле.
- ★ GBIF объединяет **разнообразные источники данных с помощью стандартов данных, включая Darwin Core**.
- ★ В настоящий момент более 2000 организаций опубликовали на сайте GBIF информацию о более чем **3,01 миллиардов записей**
- ★ Сайт GBIF htpp://gbif.org

* по состоянию на 14..11.2024

TOP10 поставщиков сведений в GBIF

- ★ Cornell Lab of Ornithology (eBird) 1 512 428 698
- ★ UMS PatriNat (OFB-CNRS-MNHN), Paris 169 819 392
- ★ SLU Artdatabanken, Sweden 108 088 266
- ★ iNaturalist.org 101 233 851
- ★ Observation.org 101 144 945
- ★ Finnish Biodiversity Information Facility 46 348 955
- ★ The Norwegian Biodiversity Information Centre (NBIC) 35 137 107
- ★ Danish Ornithological Society 34 077 388
- ★ Butterfly Conservation 31 255 557
- ★ United States Geological Survey 30 994 402

eBird

RG 136 657 864

По состоянию на 14.11.2024.

GBIF и iNaturalist

- ★ **В GBIF попадают не все записи из iNaturalist**, а только имеющие «исследовательский уровень» и один из трех типов открытых лицензий (**CC0, CC BY, CC BY-NC**).
- ★ В январе 2023 года платформа **iNaturalist стала крупнейшим поставщиком данных по сосудистым растениям мира в GBIF.**
- ★ Тройка лидеров поставщиков GBIF-данных по сосудистым растениям из iNaturalist на 8 января 2023 г.: США (9 993 265 наблюдений), **Россия (1 959 783)** и Канада (1 821 636).

История iNaturalist: Беркли у истоков

- ★ 2008 iNaturalist.org — диплом студентов **Беркли Нейта Эгрина, Джессики Клайн и Кен-ичи Уеда**. Позднее к ним присоединился веб-разработчик **Син Макгрегор**
- ★ 2011 **Кен-ичи Уеда** начал сотрудничество со **Скотом Лоури**, из Стэнфорда, своим преподавателем в Беркли. Сейчас они на равных директора iNaturalist
- ★ 24.04.2014 iNaturalist вошел в состав **Калифорнийской Академии наук**
- ★ 2014 на iNaturalist **1 000 000** наблюдений
- ★ 2017 iNaturalist получил статус «совместной инициативы» Калифорнийской Академии наук и National Geographic (США)
- ★ 2023 iNaturalist стал **НКО** со статусом 501 c(3)
- ★ Сентябрь 2024 29th Heinz Awards вручена Скоту Лоури и Кен-ичи Уеда
- ★ 14.11.2024 на iNaturalist **218 623 832** наблюдений

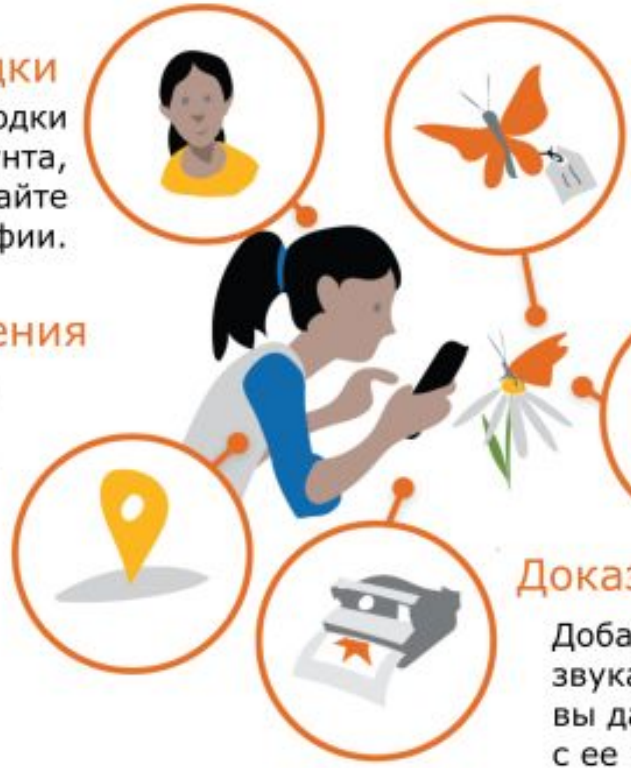
«Самое красивое место в Интернете»
The New York Times

Автор находки

Вы добавляете находки из своего аккаунта, пожалуйста загружайте только свои фотографии.

Место наблюдения

Находка должна иметь координату и оценку ее точности. Координату можно скрыть, если необходимо.



Предмет наблюдения

Определение организма до группы или более точно до вида. С фотографией можно совсем не заполнять это поле и дождаться помощи сообщества.

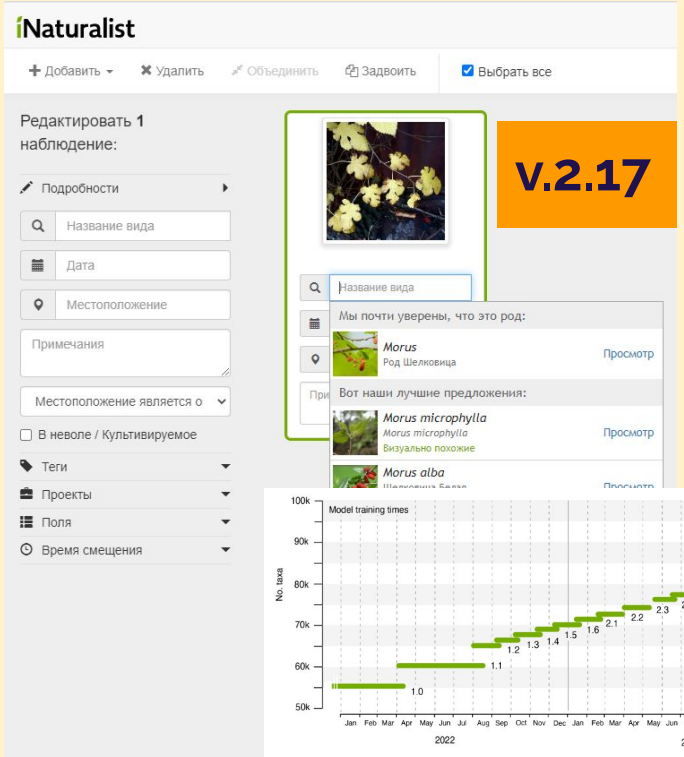
Дата наблюдения

Записывайте дату находки, а не дату ее загрузки в яНатуралист.

Доказательство наблюдения

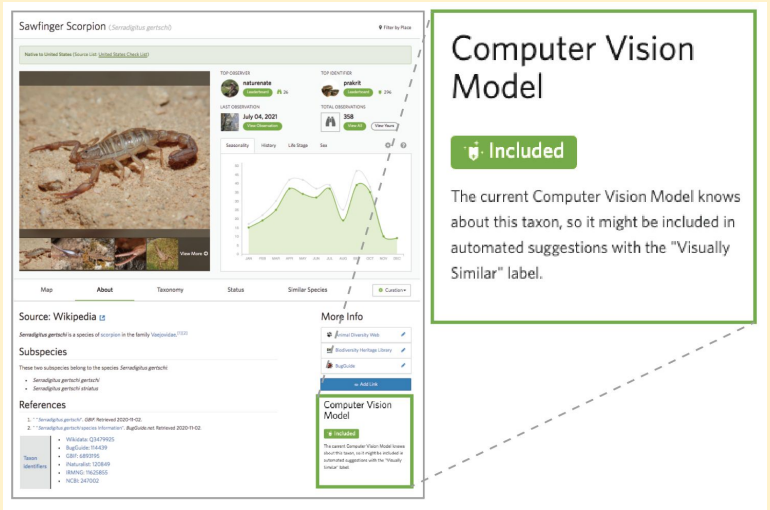
Добавляя фотографию или запись звука к наблюдению, вы даете возможность сообществу с ее помощью помочь или улучшить определение организма. Фотографии лучшего качества и с разных ракурсов помогут сделать это более качественно.

iNaturalist как технологический лидер: нейронная сеть для определения вида

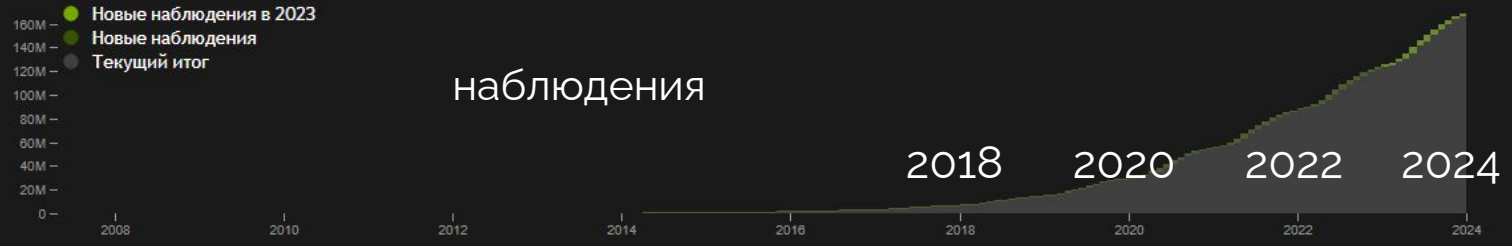


- ★ ИИ определяет **95 903** таксонов
- ★ ИИ натренирован на **>27 млн** фото
- ★ Надо загрузить **100** фото вида для ИИ

1145 таксонов добавлено 9.11.2024

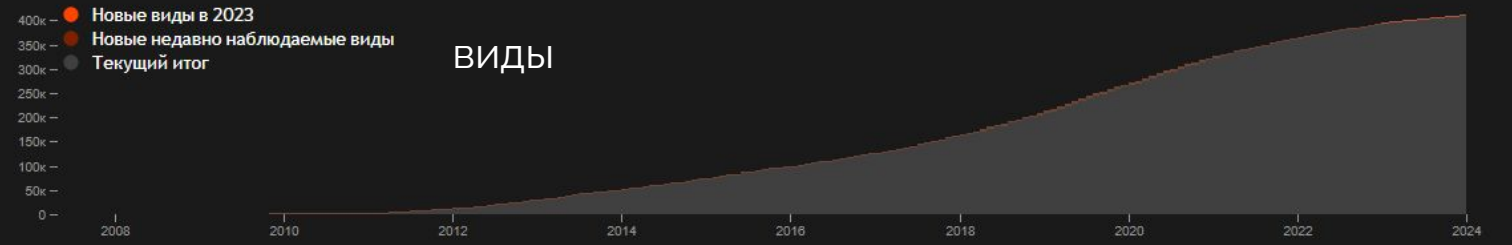


Рост

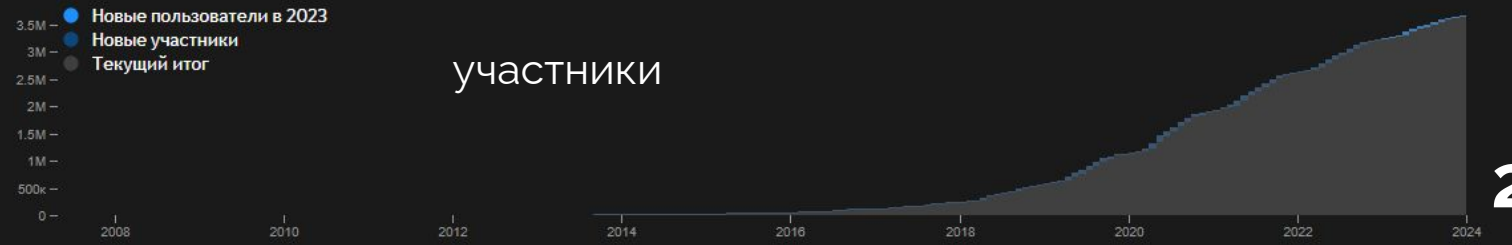


наблюдения

2018 2020 2022 2024



виды



участники

2023

INATURALIST

2023

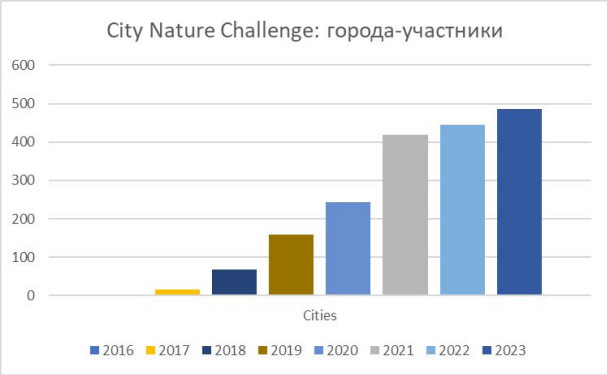
41 352 759
НАБЛЮДЕНИЙ

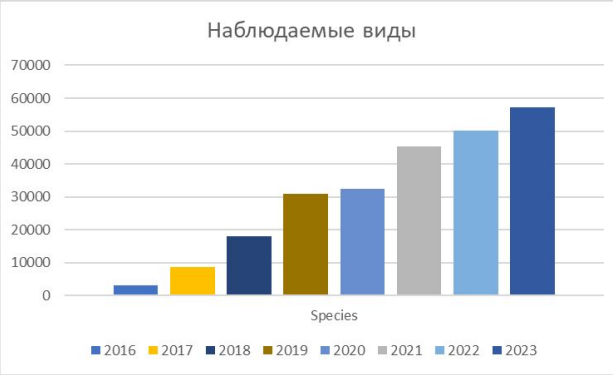
299 474
ВИДОВ

58 999 228
ИДЕНТИФИКАЦИЙ

1 106 378
ЧЕЛОВЕК

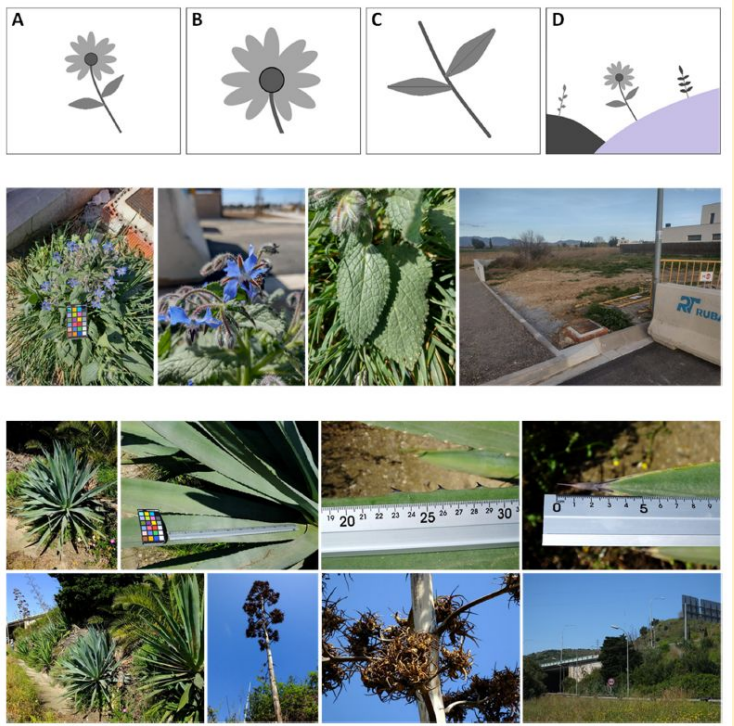
City Nature Challenge и другие биоблицы



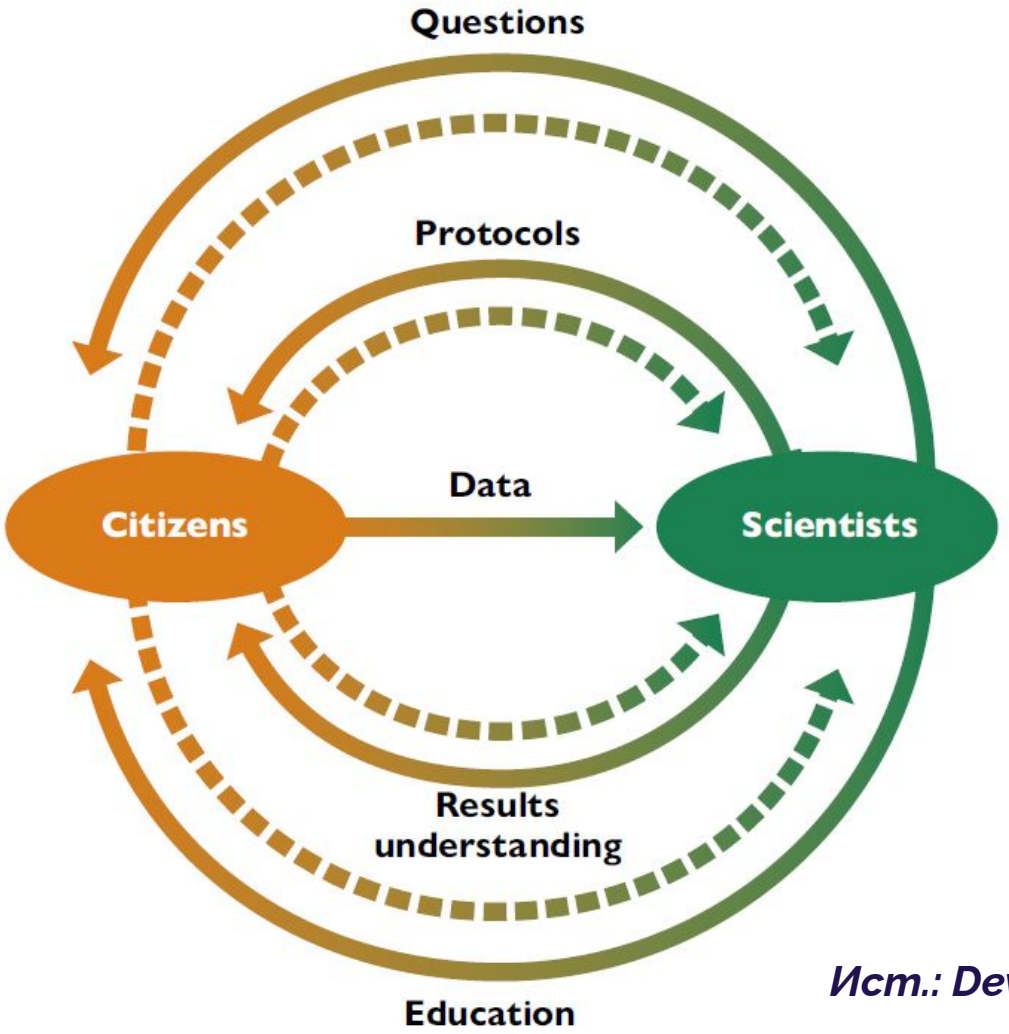


Трудности использования данных iNaturalist

- ★ Фотографии низкого качества, связанные с наблюдениями
- ★ Ошибки таксономической идентификации
- ★ Отсутствие различий между наблюдениями за видами в неволе и в дикой природе
- ★ Отсутствие точности в географических координатах
- ★ Дублированные записи
- ★ Таксоны, которые не могут быть включены в таксономический справочник растений iNaturalist



Дополнительные материалы (видео)



Исм.: Devictor et al. (2010)

Десять принципов гражданской науки

1. Гражданская наука активно привлекает людей к участию в научных исследованиях, в которых они играют значимую роль.
2. Проекты гражданской науки нацелены на получение настоящих научных результатов.
3. Участие в гражданской науке приносит пользу как профессиональным, так и гражданским ученым.
4. Гражданские исследователи могут участвовать на всех этапах научного процесса, если они этого хотят.
5. Проекты гражданской науки предоставляют участникам обратную связь о том, как используются их данные.
6. Гражданская наука имеет более широкие возможности для вовлечения общества.
7. Данные проектов гражданской науки становятся доступными общественности, а результаты публикуются в открытом доступе, если это возможно.
8. Вклад гражданских исследователей (научных волонтеров) признается в результатах и публикациях проектов.
9. Программы гражданской науки оцениваются по их научным достижениям, качеству данных и влиянию на общество.
10. Руководители проектов учитывают правовые и этические аспекты, включая вопросы авторства, конфиденциальности и охраны окружающей среды.

ecsa European Citizen Science Association

Источник

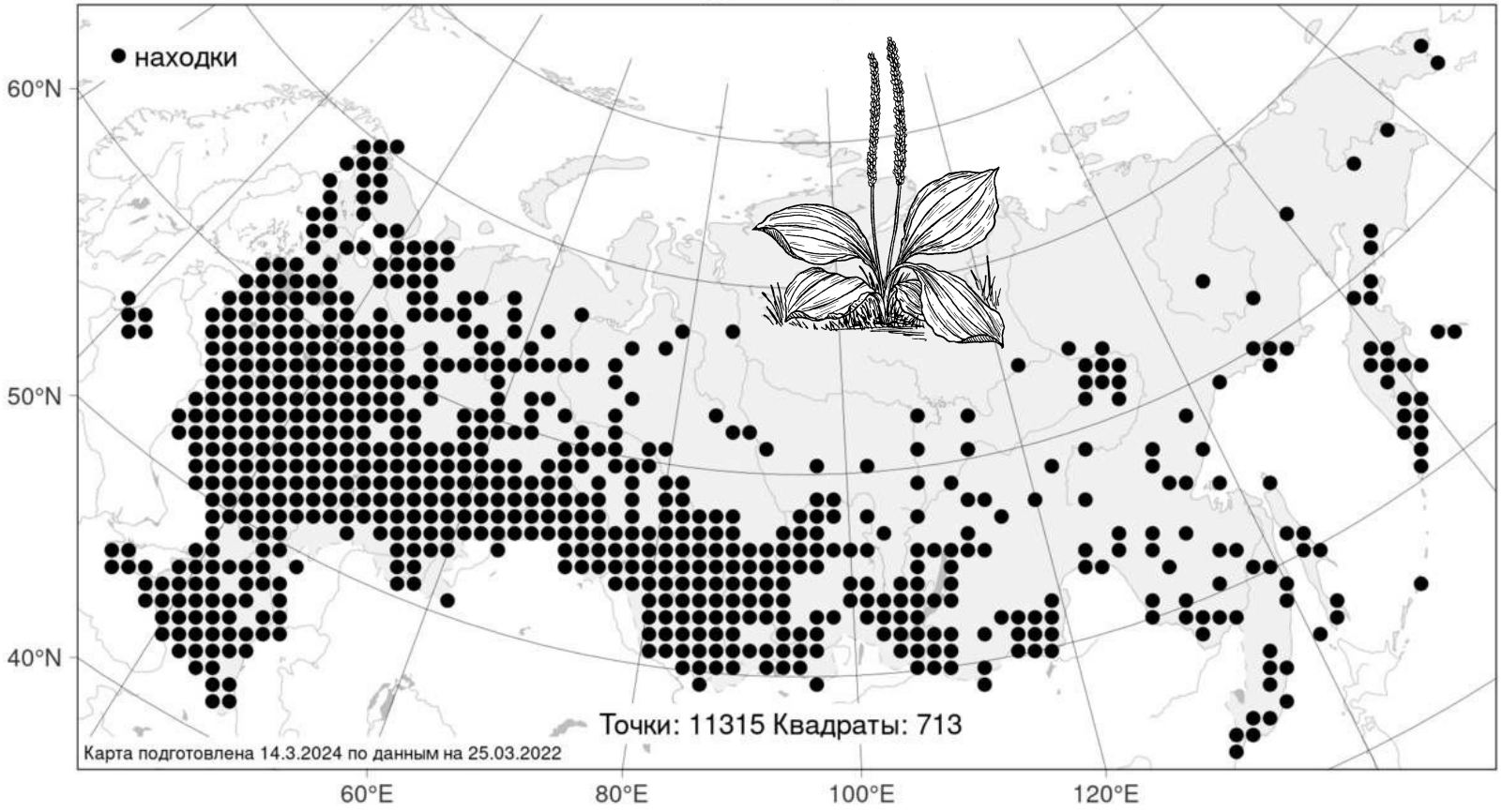
Серегин
Алексей Петрович
д.б.н., в.н.с.,
куратор Гербария МГУ

проект
“Флора России”

Условные обозначения на карте

Весь мир | RG | 4 049 436 НАБЛЮДЕНИЙ | 8 431 ВИД | 11 429 ЭКСПЕРТОВ | 28 740 НАБЛЮДАТЕЛЕЙ

Plantago major

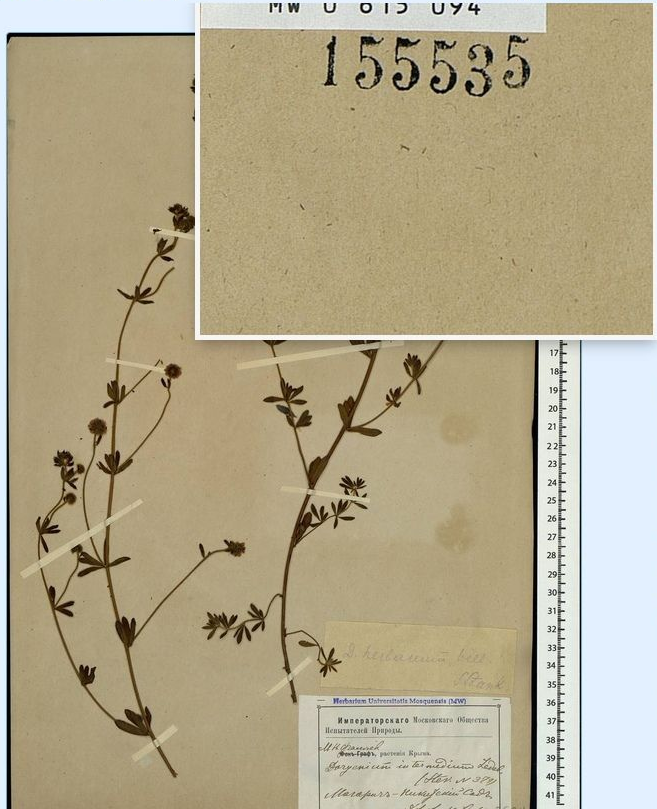


Помогатор Цифрового гербария МГУ

Dorycnium intermedium - Пятилистник средний [MW0615094]

Полное изображение

Масштаб лупы 3X



Вернуться к предыдущему

Назаровский номер

Неочевидно

Пропустить

Ещё до войны наш куратор Михаил Иванович Назаров конторским нумератором проштамповал свыше 263 тыс. образцов, которые находились в тот момент в фондах Гербария МГУ. Особенно важно было подвести итоги бурного роста гербария в 1930-е гг. По итогам этой работы мы впервые точно узнали, сколько образцов находится в коллекции: по-видимому, образец MW0585730 из Южной Африки стал последним, на котором Назаров поставил номер (263306). Это произошло, вероятно, в конце 1940 г. или в самом начале 1941 г.

С тех пор коллекция Гербария МГУ выросла вчетверо. В этой миссии мы проверяем все образцы, собранные до 1940 г. включительно, в поисках «назаровских номеров» - аккуратных чёрных оттисков в правом верхнем углу каждого гербарного листа. В этой миссии три варианта ответа: окошко для ввода номера, «Неочевидно» и «Пропустить».

Сложности связаны с тем, что после переезда Гербария МГУ в 1953 г. в новое здание на Ленинских горах некоторые образцы не помещались по ширине в новые шкафы. Некоторые листы с краёв были подрезаны, в том числе затронув последние цифры «назаровских номеров». Кроме того, часть номеров может быть случайно закрыта растениями, этикетками, а иногда и штрихкодами.

Формат ввода (с заглавным латинским «X» вместо закрытых / обрезанных цифр):
89098 (целый номер или потеря цифры неочевидна);
X78906 (первая цифра закрыта);
17890X (последняя цифра на краю листа обрезана).

Как установить, что какие-то цифры обрезаны? Образцы, которые попадают в миссию, идут по порядку родов системы Энглера и алфавиту видов. Этот порядок использовался в коллекции и при Назарове, что помогает восстанавливать частично утраченные номера. Так, если у вас идут образцы с оттисками «22340», «22338», «22346», то номер на краю листа «2234», скорее всего, просто обрезан и его нужно вводить как «2234X».

Если номер отсутствует, то в этом случае в окошке ставится прочерк (-).

Рейтинги

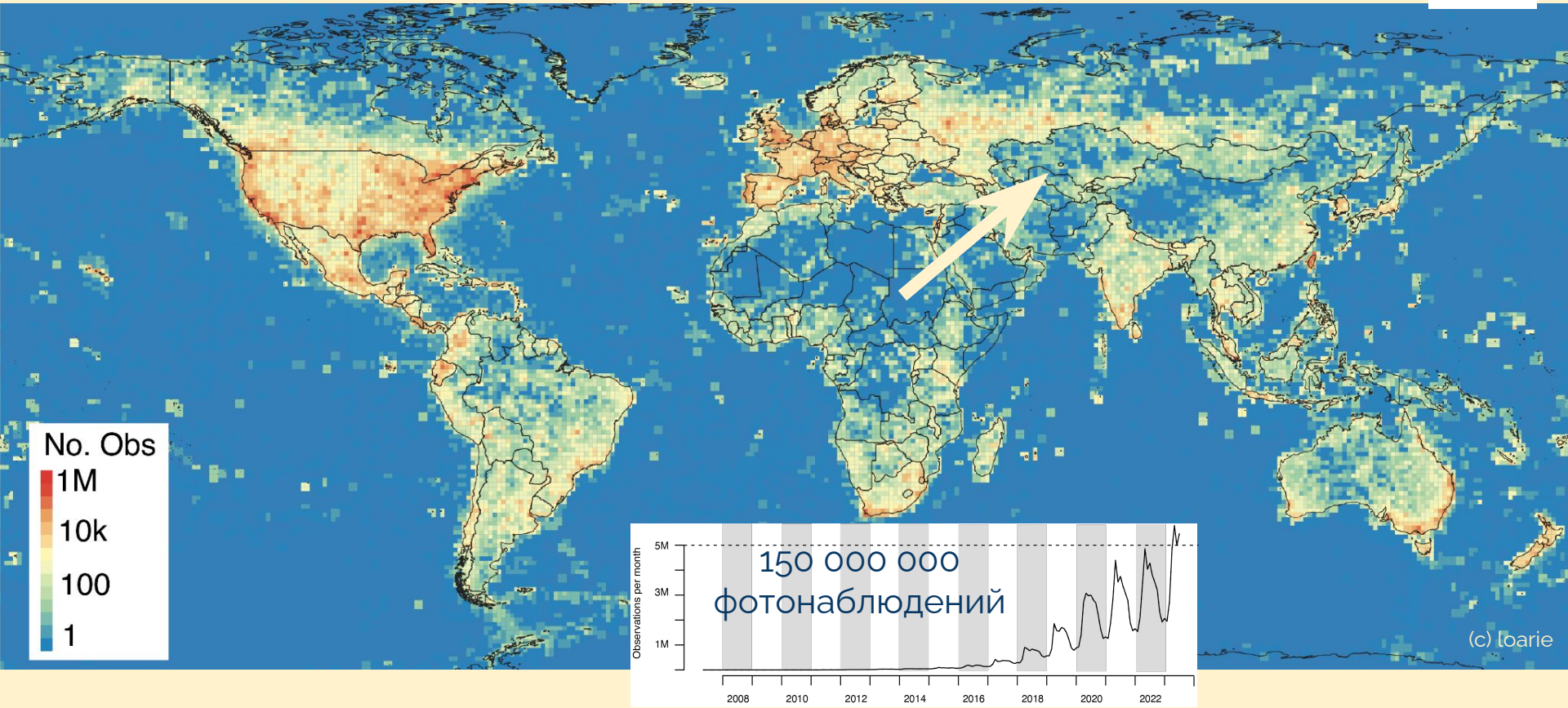
Помогатор

Ответов: 51190
Правильно: 28986
Не подтверждено: 21124
Неверно: 678
Пропущено: 406

Назаровский номер

Всего образцов: 1307
Доступно: 663
Ответов: 3043
Правильно: 2562
Не подтверждено: 420
Неверно: 60
Пропущено: 1

Глобальная статистика iNaturalist: точки



* по состоянию на 29.06.2023

Семинар о возможностях iNaturalist в декабре 2022 года

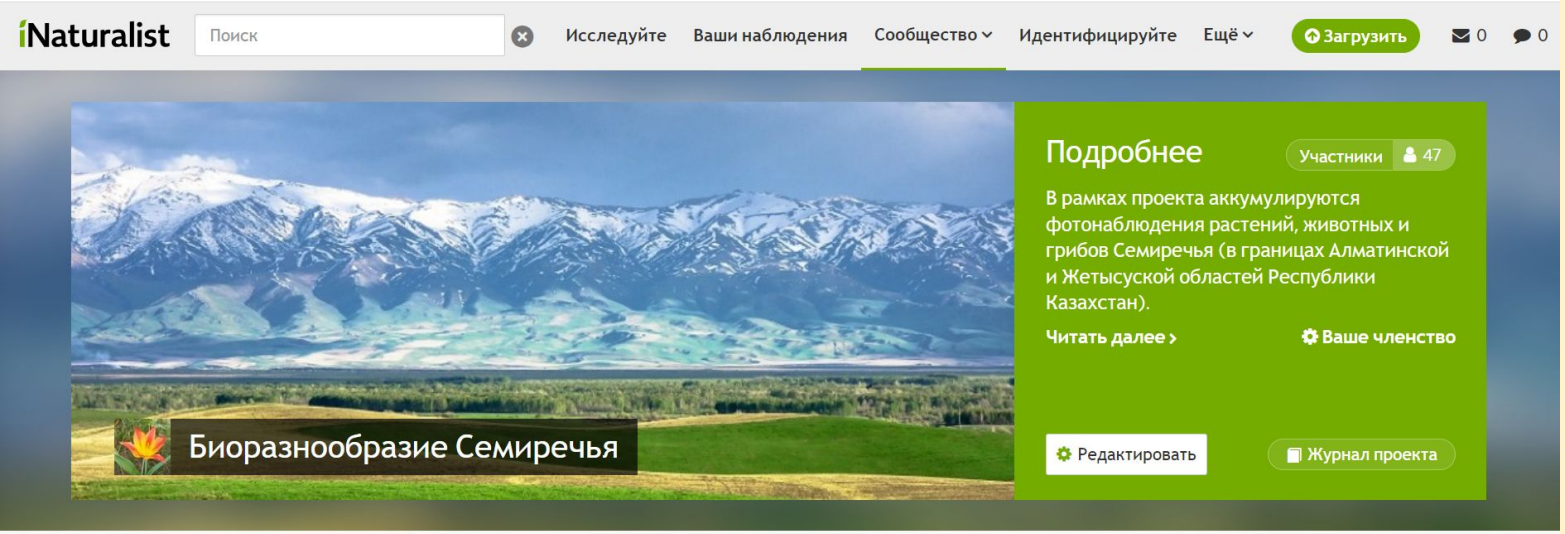
ПОЛОЖЕНИЕ
регионального исследовательского конкурса
«Биоразнообразие Семиречья: уязвимые виды, белые пятна»

Участникам конкурса предлагается найти и сфотографировать как можно большее количество растений, животных и грибов, особое внимание обратив на редкие и находящиеся под угрозой исчезновения виды, занесенные в Красную книгу Республики Казахстан, принять участие в инвентаризации флоры и фауны особо охраняемых природных территорий Семиречья (в границах Алматинской и Жетысуских областей) и малонарушенных природных территорий Семиречья, входящих в состав “горячей точки” биоразнообразия “Горы Центральной Азии”, в том числе в “белых пятнах” — местах, которые мало посещаются научными работниками и натуралистами.

Информация, собранная участниками конкурса, размещается на платформе iNaturalist.org. После определения видового названия и получения исследовательского статуса (верификации) фотонаблюдения автоматически переносятся в мировой агрегатор данных о биоразнообразии — GBIF (Global

Четыре приоритета 2023 года

- виды, занесенные в Красную книгу Республики Казахстан и как угрожаемые в различной степени в Красный список МСОП
- малоисследованные районы Семиречья (“белые пятна”)
- биологическое разнообразие ООПТ Алматинской и Жетысуской областей,
- биологическое разнообразие малонарушенных природных территорий “горячей точки” биоразнообразия “Горы Центральной Азии”



47 участников конкурса

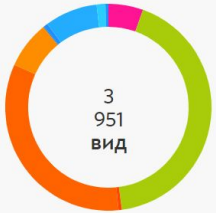
Обзор | 40 757 НАБЛЮДЕНИЙ | 3 951 ВИД | 2 136 ЭКСПЕРТОВ | 693 НАБЛЮДАТЕЛЕЙ | Статистика

Research grade. 2023

- **10 388** НАБЛЮДЕНИЙ
- **1 684** ВИДОВ
- **778** ЭКСПЕРТОВ
- **226** НАБЛЮДАТЕЛЕЙ

66,58% RG

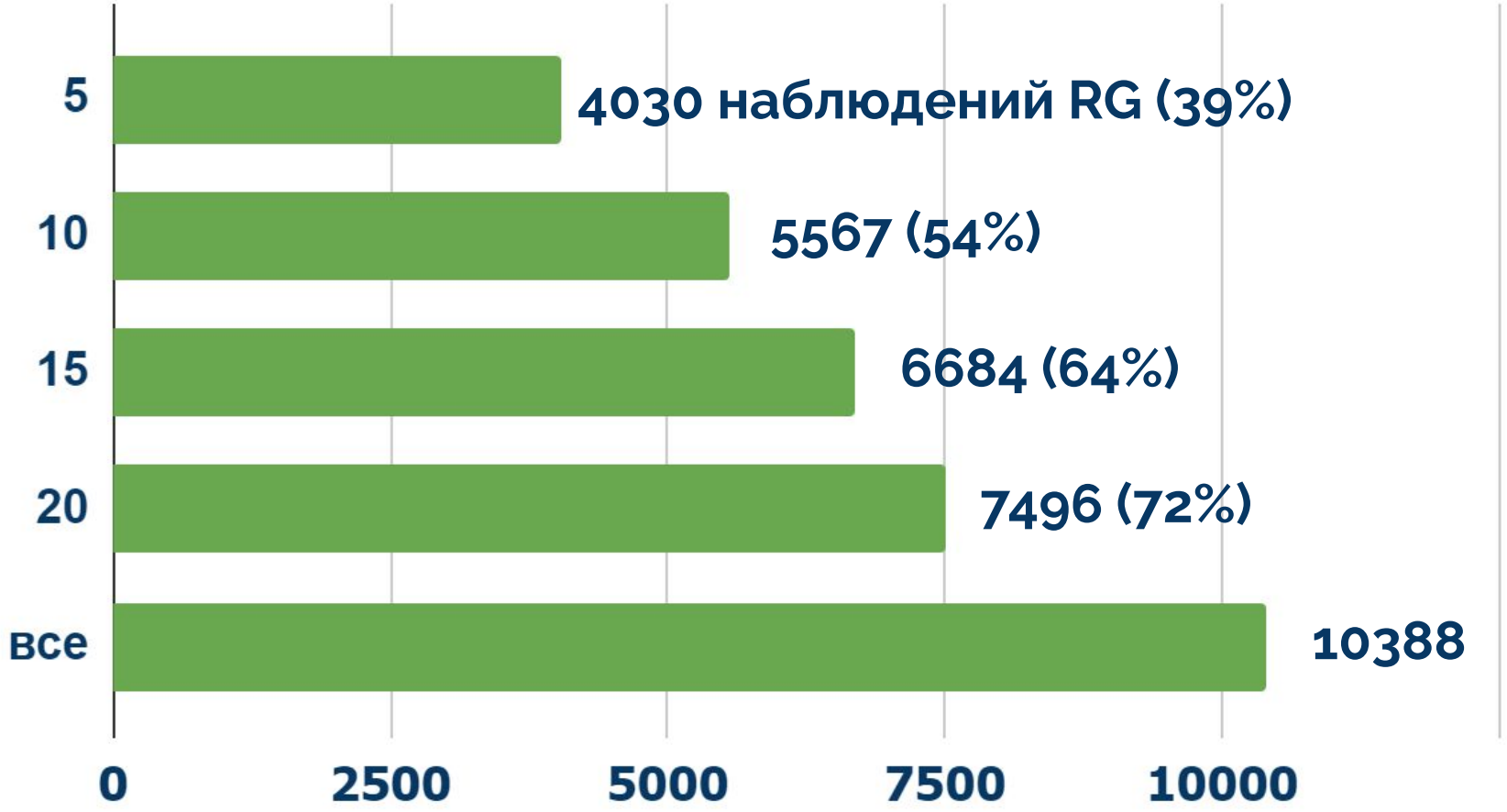
- Исследовательский уровень
- Требуется идентификация
- Обыкновенное

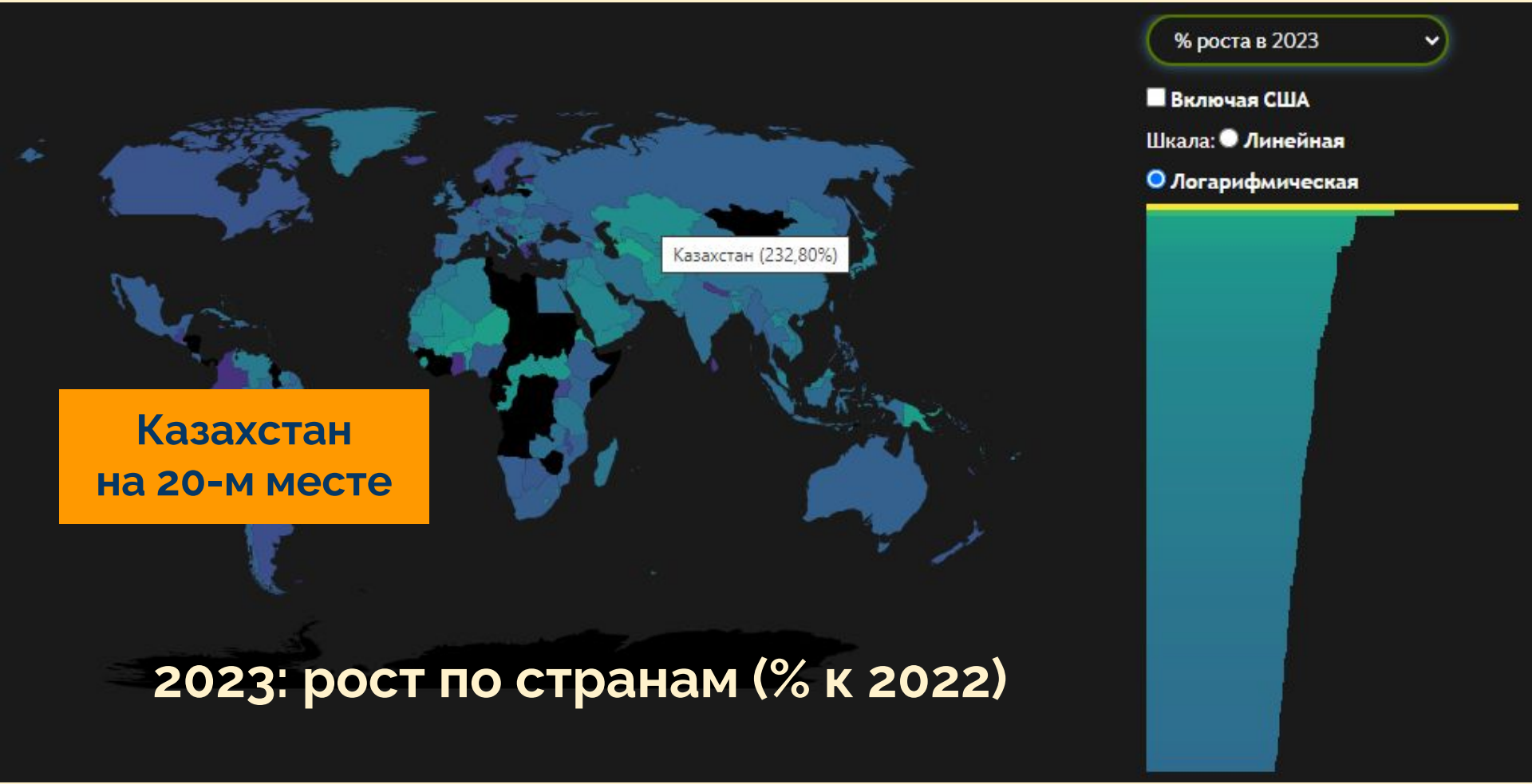


- Неизвестно
- Простейшие
- Грибы
- Растения
- Хромисты
- Моллюски
- Насекомые
- Паукообразные
- Лучепёрые Рыбы
- Земноводные
- Пресмыкающиеся
- Птицы
- Млекопитающие
- Другие Животные

- Улучшение
- Поддерживающее мнение
- Ведущий
- Независимое мнение

Биоразнообразие Семиречья: вклад наблюдателей




% роста в 2023
Включая США
Шкала: Линейная
Логарифмическая
Казахстан (232,80%)
Казахстан
на 20-м месте
2023: рост по странам (% к 2022)


ПРИСМАТРИВАЮ
ЗА ПРИРОДОЙ
KZ

The 2024 CNC takes place in 2 parts

1

April 26 – April 29, 2024

Taking pictures of wild plants and animals.

2

April 30 – May 5, 2024

Identifying what was found.

iNaturalist

INSTITUTE OF ZOOLOGY
REPUBLIC OF KAZAKHSTAN

ГЛАВНЫЙ БОТАНИЧЕСКИЙ САД

ОТКРЫТАЯ ЛАБОРАТОРИЯ ПРИРОДООХРАННОЙ БИОЛОГИИ

BEGONIA
DESIGN STUDIO

Знакомство с iNaturalist

- Советы новичкам
- City Nature Challenge 2024
- Включайся!

Алматы, 2024

10:20 100%

Публикации

shura.dubynin
Алматы

Нравится signichs и ещё 42

shura.dubynin Небольшой гид по правильной съемке растений)... ещё

green.salvation 🙌🙌🙌

17 апреля

shura.dubynin
Главный Ботанический Сад - г. Алматы

1 Снять растение целиком

Ракурс: сбоку, а не сверху

Свет: тень, а не яркое солнце

Фон: однотонный, без деталей, можно черный крафт

City Nature Challenge и iNaturalist: самое важное

Апрель, 19, 2024 Dubynin

В связи с грядущей всемирной акцией City Nature Challenge мы решили, что стоит ответить на наиболее волнующие вопросы ее потенциальных участников.

Итак, поехали.

Что такое iNaturalist?

iNaturalist — современная интернет-платформа для сбора и организации наблюдений дикой природы, которая объединяет энтузиастов её изучения.

Привлекая любителей природы разного профиля, от туристов до экологов, сайт способствует расширению знаний о местном биоразнообразии и стимулирует дальнейшее исследование

Поиск

НЕДАВНИЕ ЗАПИСИ

Мысли в День Земли

City Nature Challenge и iNaturalist: самое важное

Человек планеты Николай Полунин

Караканские тайнобрачники Николая Лащинского

Зеленый кот, история НГУ и бореализм: о чем будут говорить на Ночи научных историй в Академгородке

АРХИВЫ

2024 Results
City Nature Challenge

2,436,844 Observations

65,682+ Species

Including 3,940+ rare/endangered/threatened species

83,528 Participants

Congratulations to these Cities!

Most observations:	La Paz, Bolivia – 165,839 Monterrey, México – 81,727 San Antonio, TX, USA – 64,728
Most species:	La Paz, Bolivia – 5,352 Hong Kong, China – 4,775 Graz, Austria – 4,448
Most participants:	La Paz, Bolivia – 3,593 Monterrey, México – 2,576 San Francisco, CA, USA – 2,552

Global Results Through the Years

	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cities	2	16	68	159	244	419	445	482	690
Countries	1	1	17	28	40	44	47	46	51
Observations	19.8K	125K	441K	963K	815K	1.27M	1.7M	1.9M	2.4M
Species	2.5K	8.6K	18K	31K	32.6K	45.3K	50.1K	57.2K	65.7K
Observers	1K	4K	17K	32K	41K	52K	67.2K	66.4K	83.5K

K = thousand. M = million

Interesting Finds from Around the World

Naked Sea Butterfly
(*Clione limacina*)
Greater Victoria, BC, Canada
found by Steph Brulot-Sawchyn
Not often observed on iNaturalist, sea butterflies are free-swimming pelagic sea snails!

Dingy Purplewing
(*Eunica monima*)
South Florida, USA
found by Liz T (@lt422)
A rare butterfly for Florida, & the only observation of this species for this year's CNC.

***Tibicina* sp. Cicada**
Pamplona / Iruña, Spain
found by Txalen Galina-Gaiton
Likely emerged from a nearby hole.

Smooth Snake
(*Coronella austriaca*)
Graz, Austria
found by @die_fallenden
Affected by habitat degradation & destruction.

Malus sieversii
Almaty, Kazakhstan
found by Ксения Т.
Wild apple species native to Kazakhstan, in decline due to habitat loss.

Lizard Goby
(*Rhinogobius flumineus*)
Tokyo, Japan
found by @daichi2023
Endemic to Japan, found in fast-flowing mountain streams and small rivers.

Corallorhiza macrantha
México City, México
found by Anayeli Guzmán
Coralroot orchid species found only in Mexico; it is parasitic and does not photosynthesize!

Taiwan Thrush
(*Turdus niveiceps*)
Central Taiwan
found by Shao Qi
A rare bird species endemic to Taiwan, found in its central mountain forests. The only one seen in this year's CNC!

Baird's Tapir
(*Tapirus bairdii*)
Petén, Guatemala
found by @josebarrientos
Captured on a camera trap for CNC, this species is endangered due to loss of habitat.

Pygmy Greenhood
(*Pterostylis clivosa*)
Geelong, VI, Australia
found by Peter Crowcroft
This small orchid with a green hood is locally endangered in Victoria, Australia.

Lycosa erythrognatha
Adrianópolis, Brazil
found by Matheus Freitas
A cool wolf spider and the only one known to feed on a local species of toad.

Heterosphecia indica
Kottat, Kerala, India
found by Athul Sankar C
First record of this moth on iNaturalist, previously only known from a single specimen collected in 1925 – a rediscovery after 99 years!

Blue Sea Star
(*Phataria unifascia*
Galápagos, Ecu
found by Billy Bensted-S
The color blue is rare in nature, and this echinoderm adds to the biodiversity of reefs they inhabit.

Indri (*Indri indri*)
Madagascar
found by @kadae
This is one of the largest living lemurs, and is a critically endangered species.

Katipō spider
(*Latrodectus katipo*)
Ōtautahi, Aotearoa (Christchurch, New Zealand)
found by Dustin (@dustinlamont)
This endemic Māori-named spider is classified as seriously declining.

Dynastes neptunus* ssp. *neptunus
Cali, Colombia, *found by Humberto Calero Mejjay*
This male beetle with striking ornaments is considered a vulernatble species and is rarely observed in the area.

Anemone Stinkhorn (*Aseroe rubra*)
Greater Plettenberg Bay, South Africa, *found by @neehumball*
Very interesting, and very stinky, anemone-like mushroom!

City Nature Challenge

For more information, visit:
www.citynaturechallenge.org

Обзор | 4 869 НАБЛЮДЕНИЙ | 791 ВИД | 158 ЭКСПЕРТОВ | 57 НАБЛЮДАТЕЛЕЙ | Статистика

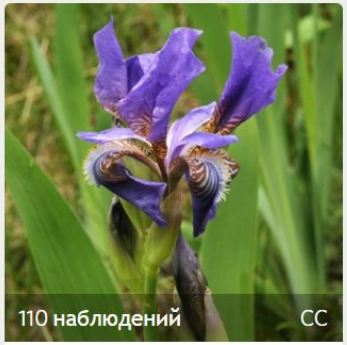
Весь мир	RG	2 918 НАБЛЮДЕНИЙ	477 ВИДОВ	135 ЭКСПЕРТОВ	44 НАБЛЮДАТЕЛЕЙ

59, 6% RG

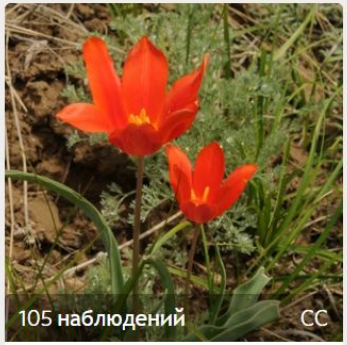
Красная книга: наблюдения CNC 2024

Almaty Agglomeration

286	23	17	21
НАБЛЮДЕНИЙ	ВИДОВ	ЭКСПЕРТОВ	НАБЛЮДАТЕЛЬ

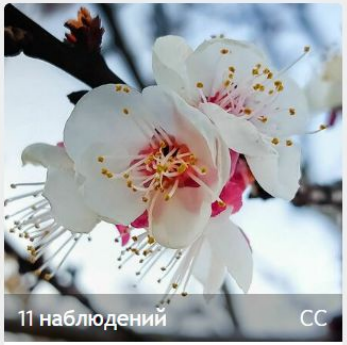


Iris alberti
(Ирис Альберта)



Tulipa ostrowskiana
(Тюльпан Островского)

Malus sieversii
(Яблоня Сиверса)



Prunus armeniaca
(Абрикос Обыкновенный)

Gymnospermium altaicum
(Голосемянник Алтайский)

Красная книга Казахстана

Подробнее

Участники 28

Здесь накапливаются сведения о видах растений, животных, грибов и лишайников, занесенных в Красную книгу Республики Казахстан (список 2006 года).

Читать далее ›

Ваше членство

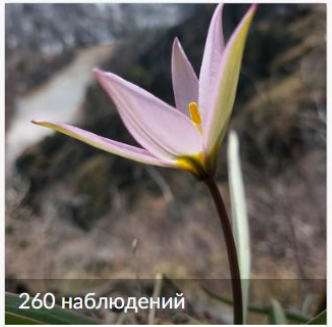
Редактировать

Журнал проекта

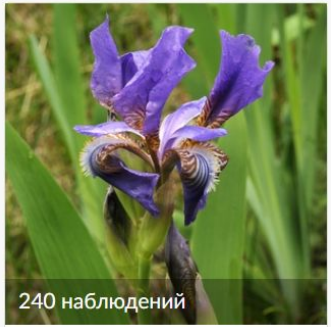
Весь мир	5 733 НАБЛЮДЕНИЯ	221 ВИД	681 ЭКСПЕРТ	482 НАБЛЮДАТЕЛЯ


278 наблюдений

Aquila nipalensis
Степной Орёл


260 наблюдений

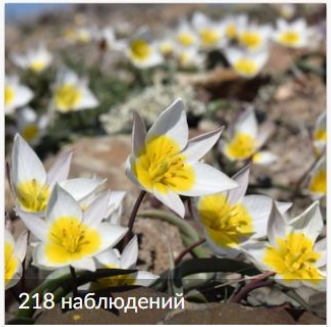
Tulipa patens
Тюльпан Поникающий


240 наблюдений

Iris alberti
Ирис Альберта


229 наблюдений

Tulipa regelii
Тюльпан Регеля


218 наблюдений

Tulipa biflora
Тюльпан Двуцветковый

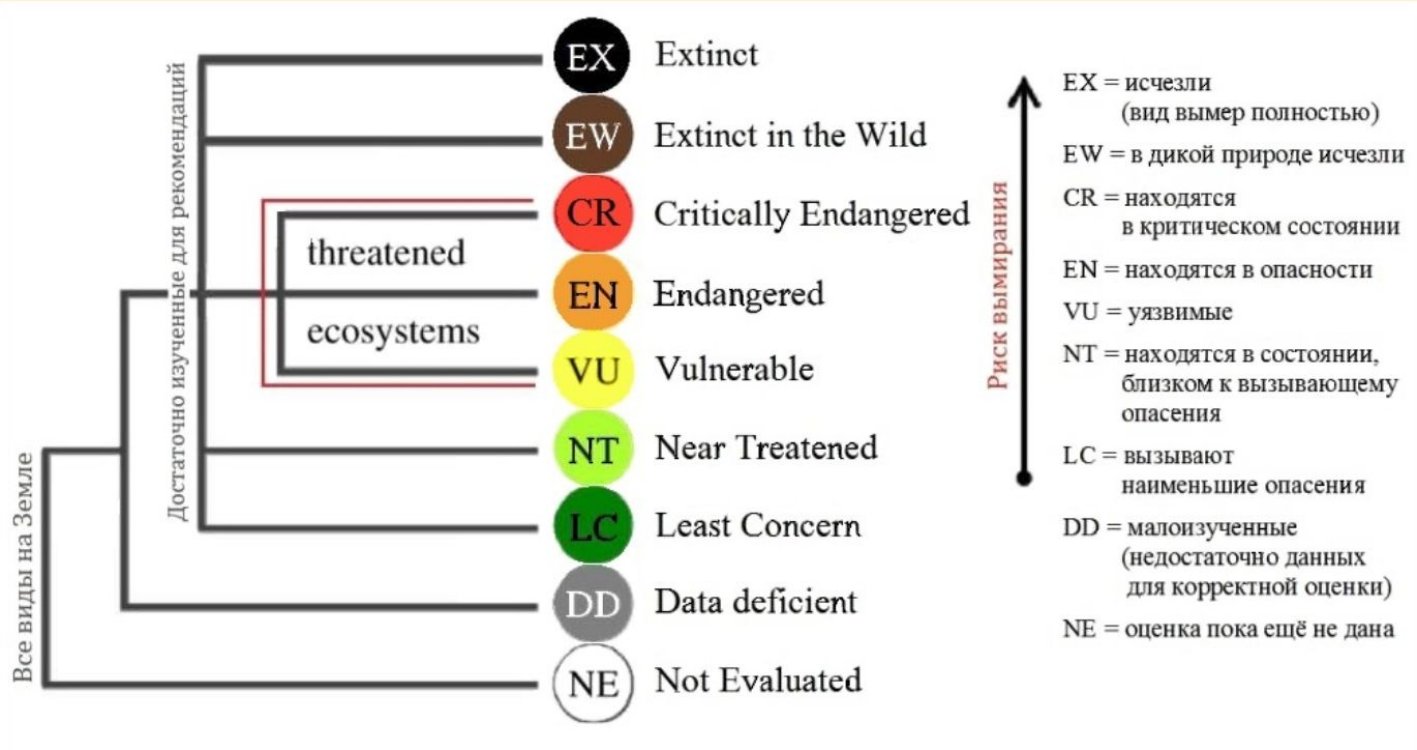
Global Biodiversity Framework 2023-2030 (2050)

- ★ Декабрь 2022 года — **Куньмин-Монреальская глобальная рамочная программа по биоразнообразию** (Global Biodiversity Framework/GBF) Конвенции о биологическом разнообразии.
- ★ GBF содержит **четыре глобальные цели и 23 задачи**, в том числе **увеличение площади охраняемых природных территорий до 30% к 2030 году (задача «30 на 30»)**. Эти задачи невозможно решить без изменения отношения к проблеме утраты биоразнообразия и поведения и без деятельного участия значительного (гораздо большего, чем сейчас) числа жителей планеты.
- ★ **Проекты гражданской науки (citizen science/CS)** предоставляют для этого уникальные возможности для сбора новых сведений о видах и параметрах экосистем, мониторинга биоразнообразия, экологического образования и природоохранного просвещения.

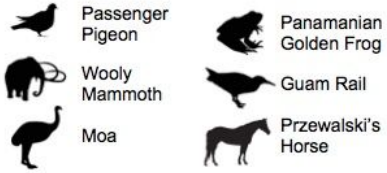

IUCN
RED LIST

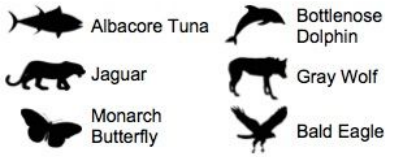

ҚАЗАҚСТАН
РЕСПУБЛИКАСЫНЫҢ
ҚЫЗЫЛ КІТАБЫ
КРАСНАЯ КНИГА
РЕСПУБЛИКИ КАЗАХСТАН
THE RED DATA BOOK
OF THE REPUBLIC
OF KAZAKHSTAN

Красный список МСОП (IUCN Red List)



IUCN RED LIST©





Extinct | **Extinct in the Wild**

Critically Endangered | **Endangered** | **Vulnerable**

Near Threatened | **Least Concern**

Out of all species that have ever lived, 99.9% of them are now extinct. The IUCN has documented 830 species known to have gone extinct since 500 AD.

Currently the IUCN has 69 species listed as extinct in the wild. These species have been extirpated from their natural range and now exist only in captivity.

IUCN RED LIST

Threatened *(encompasses CR, EN, and VU)*

To be listed as threatened, a species must fit one of the following qualifications

A projected population decline of greater than ___ over the next 10 years or three generations

80% | **50%** | **30%**

A global range of less than ___ km^2

100 | **5,000** | **20,000**

A stable global population size of less than ___ individuals

50 | **250** | **1000**

*Two other categories exist, although they have more complicated thresholds: small population size AND decreasing population, or quantitative scientific analysis that shows a high likelihood of extinction.

Near threatened species are in danger of becoming threatened. Species with least concern listings may still have declining populations or face threats, but not to the level required for a threatened listing.

Out of the RedList's 77,000 listed species, 35,000 are listed as least concern and 5,000 are listed as near threatened.

For species that have yet to be sufficiently evaluated, two additional classifications exist: data deficient (DD) and not evaluated (NE).

Оценка угрозы исчезновения вида по критериям МСОП


CERTIFICATE
CERTIFICATE
CERTIFICATE
CERTIFICATE
CERTIFICATE
GOOD MORNING ANGEL

Расширенный образец / Extended Specimen

- **Физический образец.** Сам объект, собранный в природе и хранящийся в коллекции.
- **Морфологические данные.** Подробные описания внешнего вида, структуры и измерений.
- **Генетические данные.** ДНК-сиквенсы, геномы, метагеномные данные.
- **Экологические данные.** Информация о месте и условиях сбора, включая географические координаты, тип экосистемы, климатические условия и сопутствующие виды.
- **Изображения и мультимедийные материалы.** Фотографии высокого разрешения, видео- и аудиозаписи, микроскопические изображения.
- **Метаданные о сборе.** Дата и время сбора, имя коллектора, используемые методы сбора и обработки.
- **Связанные публикации и данные.** Научные статьи, отчеты, связанные исследования и дополнительные данные, полученные из образца.
- **Информация о хранении и доступе.** Условия хранения образца, его местонахождение в коллекции, доступность для дальнейших исследований.

В качестве заключения

Глобальные данные являются неотъемлемой частью усилий по сохранению биоразнообразия. Они обеспечивают:

- **Информированное принятие решений.** Позволяют законодателям, сотрудникам министерств, научным работникам и специалистам по охране природы основывать свои действия на актуальной и точной информации.
- **Эффективное распределение ресурсов.** Помогают направлять ограниченные ресурсы туда, где они наиболее необходимы.
- **Сотрудничество.** Способствуют обмену знаниями и совместным действиям между странами и организациями, профессиональными исследователями и неправительственным сектором.

Роль проектов гражданской науки в области биоразнобразия в этих процессах продолжит расти.

СПАСИБО ЗА ВНИМАНИЕ!

Александр Дубынин
н.с. лаб. геоботаники Института ботаники и фитоинтродукции, рук. международной экспертной группы “Открытая лаборатория природоохранной биологии”

adubynin@yandex.ru
+7 747 821 53 16

Accessing and using GBIF- the essentials

Slides by: Chihjen Ko | Asia Regional Support Team
Oleg Borodin | ECA Regional Support Team

Presented by: Oleg Borodin | ECA Regional Support Team

GBIF Global Biodiversity Information Facility

Primary biodiversity data

GBIF dataset classes

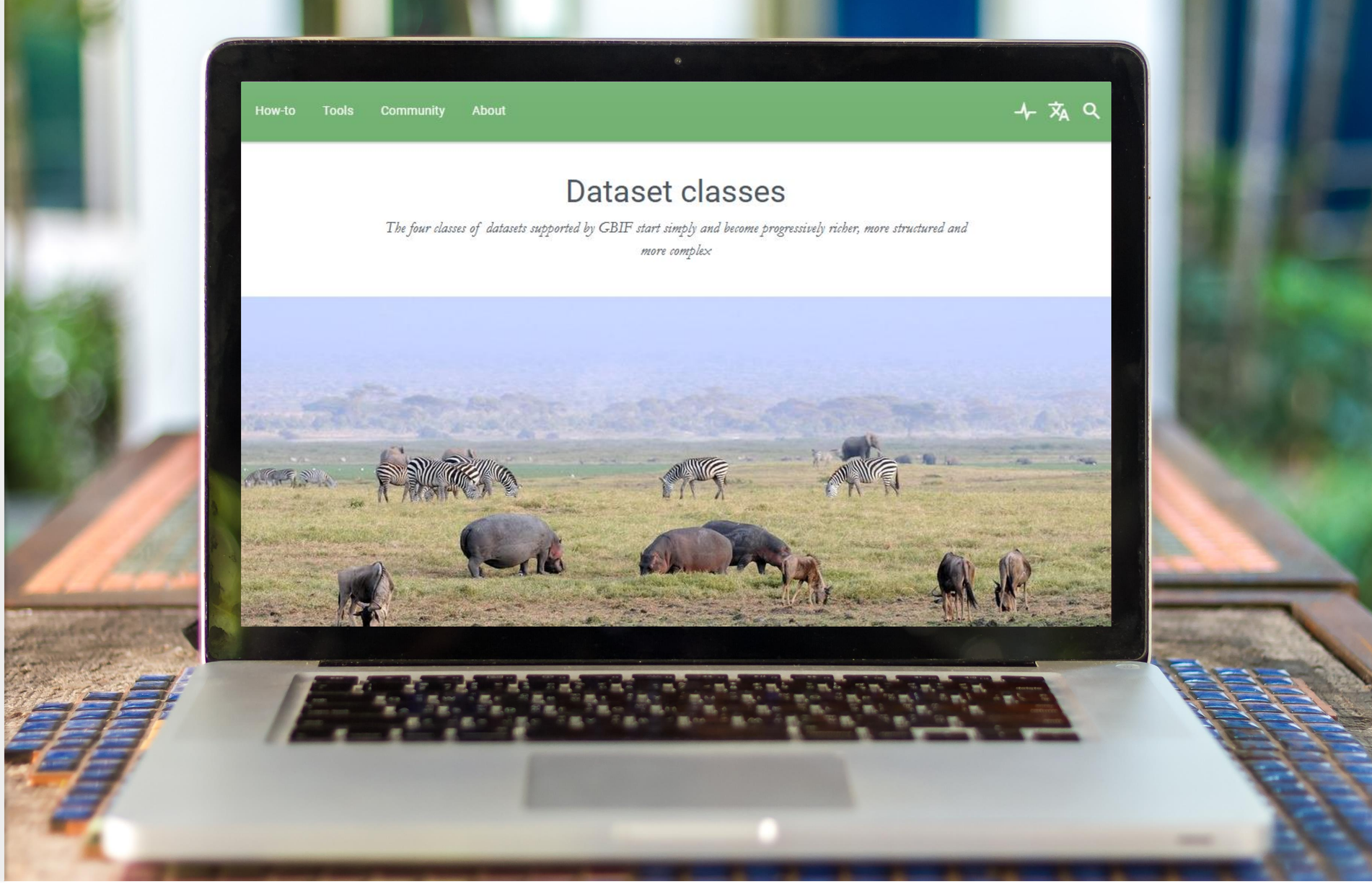
https://www.gbif.org/dataset-classes

Meta data only

Checklist

Occurrence

Sampling-event



data blog

posts community-forum gbif.org about

How to choose a dataset class on GBIF?

Marie Grosjean

2019-12-04 · GBIF · Publishing

If you are a (first time) publisher on GBIF and you are trying to decide which type of dataset would best fit your data, this blogpost is for you.

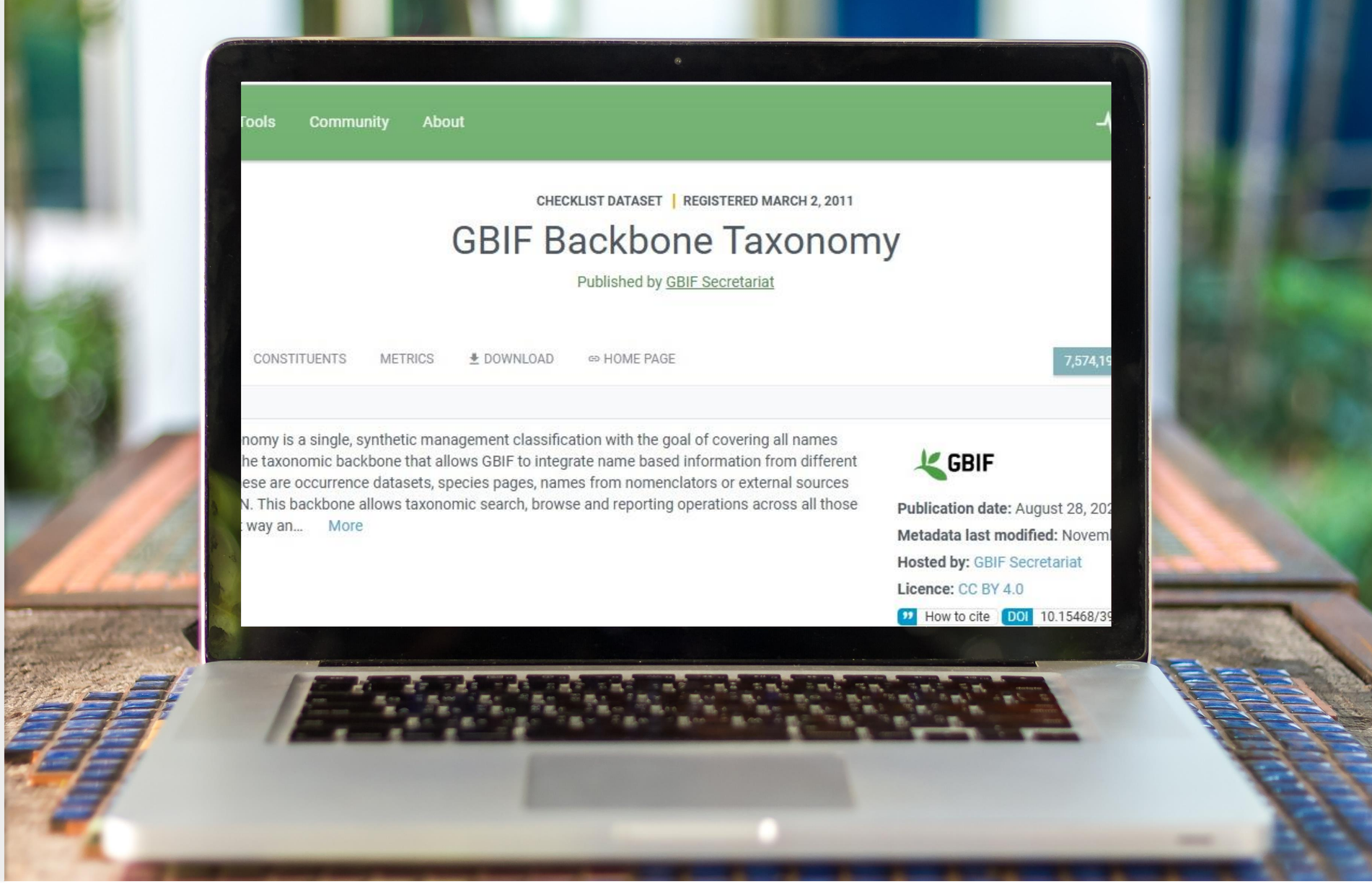
All the records shared on GBIF are organized into datasets. Each dataset is associated with some metadata describing its content (the classic “what, where, when, why, how”). The dataset’s content

https://data-blog.gbif.org/post/choose-dataset-type/

Primary biodiversity data

GBIF taxonomic backbone

The GBIF Backbone Taxonomy is a single, synthetic management classification with the goal of covering all names GBIF is dealing with. It's the taxonomic backbone that allows GBIF to integrate name based information from different resources, no matter if these are occurrence datasets, species pages, names from nomenclators or external sources like EOL, Genbank or IUCN.



The following 105 sources have been used to assemble the GBIF backbone with number of names given in brackets:

- Catalogue of Life Checklist - 4766428 names
- International Barcode of Life project (iBOL) Barcode Index Numbers (BINs) - 635951 names
- UNITE - Unified system for the DNA based fungal species linked to the classification - 611208 names
- The Paleobiology Database - 212054 names
- World Register of Marine Species - 188857 names
- The Interim Register of Marine and Nonmarine Genera - 183894 names
- The World Checklist of Vascular Plants (WCVP) - 131891 names
- GBIF Backbone Taxonomy - 114350 names
- TAXREF - 109374 names
- The Leipzig catalogue of vascular plants - 75380 names
- ZooBank - 73549 names
- Integrated Taxonomic Information System (ITIS) - 68377 names
- Plazi.org taxonomic treatments database - 61346 names
- Genome Taxonomy Database r207 - 60545 names
- International Plant Names Index - 52329 names
- Fauna Europaea - 45077 names

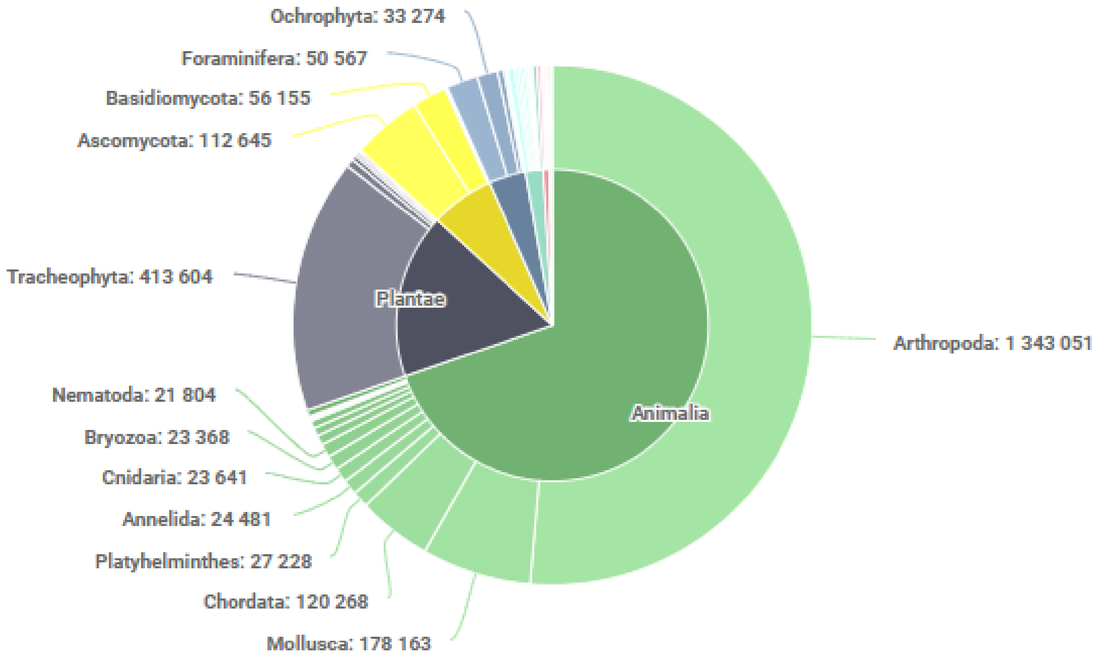
DATASET TAXONOMY CONSTITUENTS METRICS DOWNLOAD HOME PAGE 7,574,191 RECORDS 193 CITATIONS

4,114,717
Accepted names

3,197,213
Synonyms

59%
Overlap with Catalogue of Life

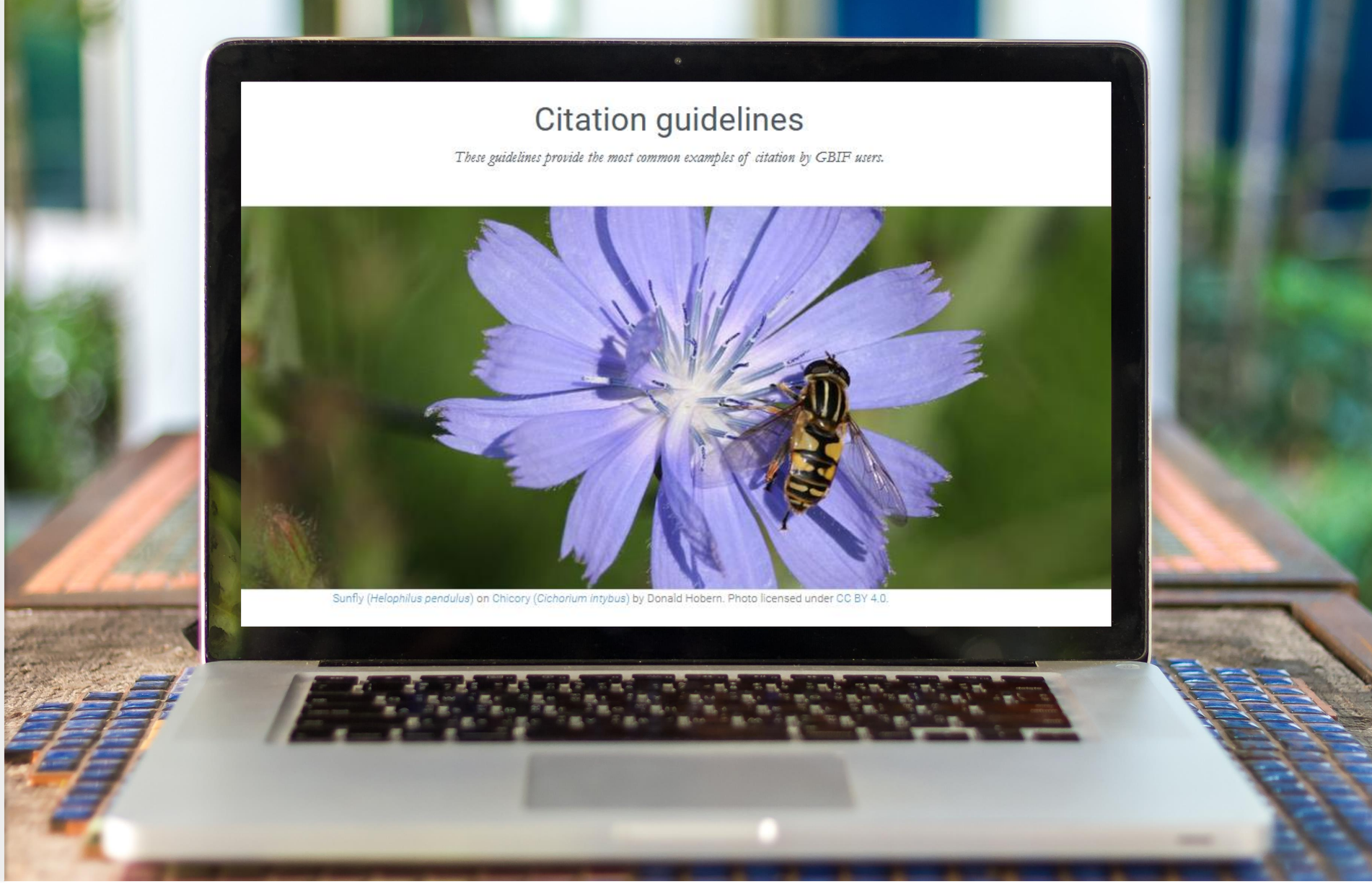
NUMBER OF ACCEPTED SPECIES BY HIGHER TAXON



Principles of GBIF-mediated data

Digital object identifiers

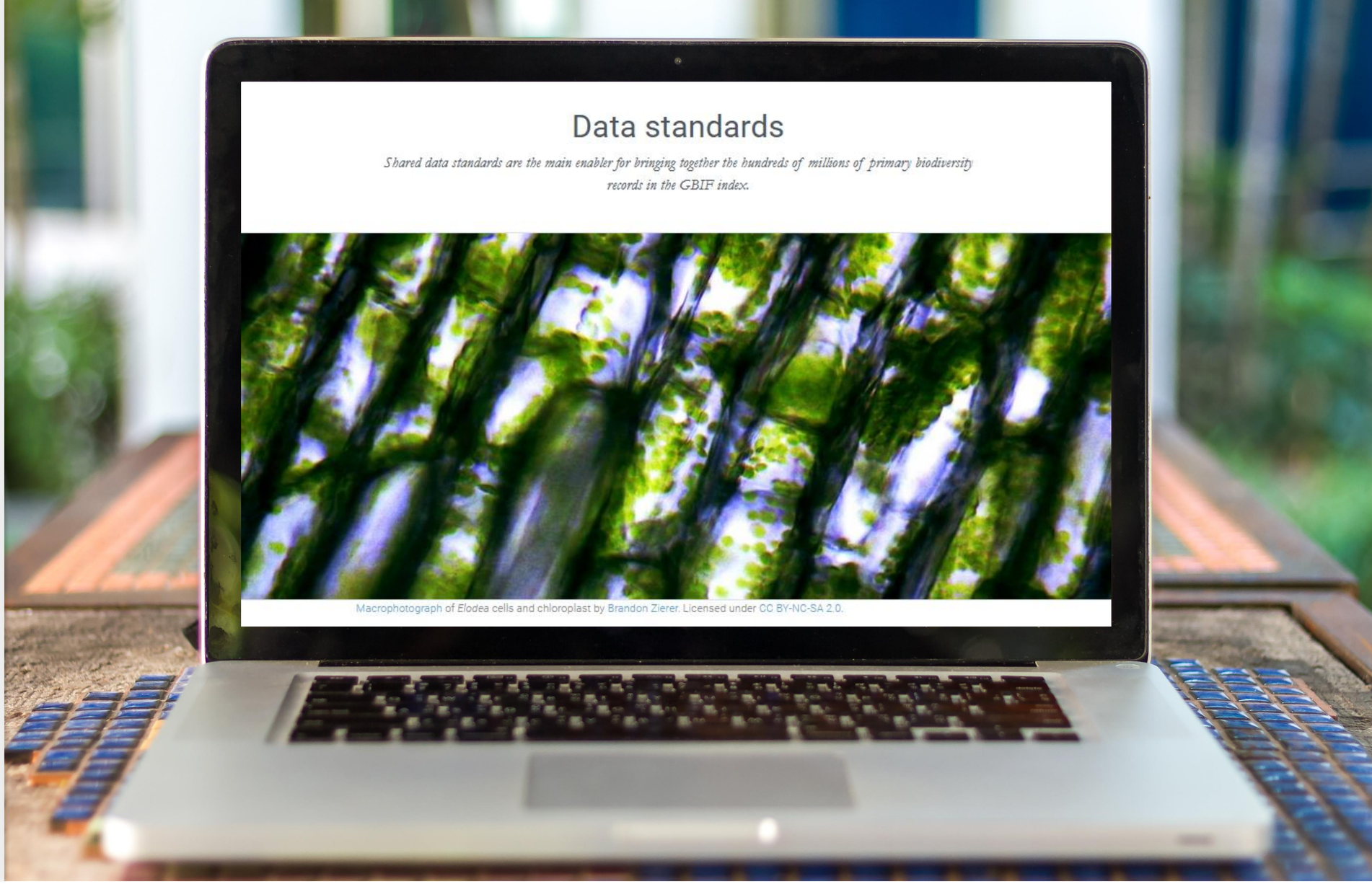
- datasets from the GBIF network
- data downloads from GBIF.org
- research articles and reports published by scientific journals, agencies and NGOs
- materials deposited in a general-use repository



Principles of GBIF-mediated data

Standards

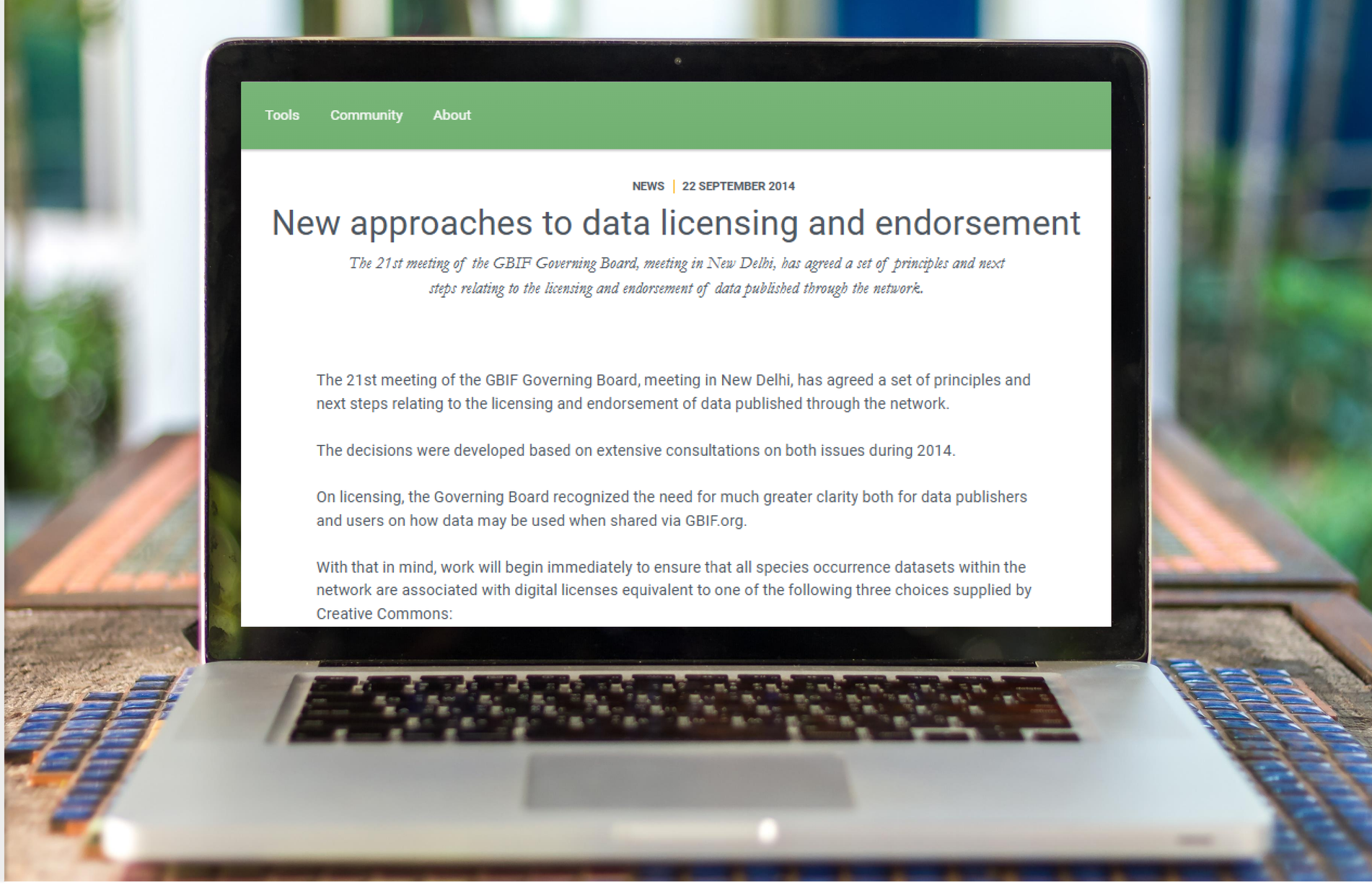
- Darwin Core
- Ecological Metadata Language (EML)
- BioCase/ABCD: The Biological Collection Access Service



Principles of GBIF-mediated data

Open data

- CC0 - no conditions for use
- CC-BY - use with attribution
- CC-BY-NC - non-commercial use with attribution



Principles of GBIF-mediated data

FAIR data

- Findable
- Accessible
- Interoperable
- Reusable

Data found on GBIF.org are FAIR.

FINDABLE

GBIF has requirements for metadata and datasets. All datasets are identified by Digital Object Identifiers (DOIs).

ACCESSIBLE

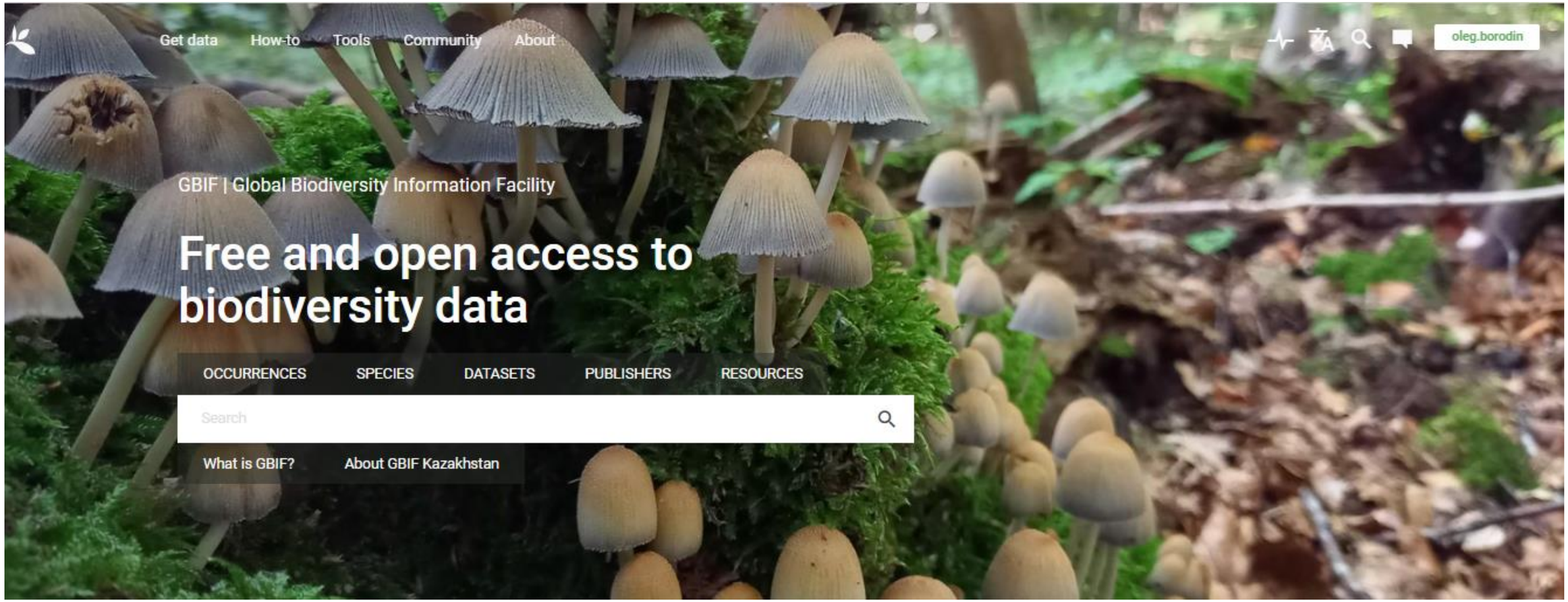
The GBIF Portal API provides a machine readable interface (REST + JSON) and use the Integrated Publishing Toolkit (IPT) as trusted data repository.

INTEROPERABLE

GBIF recommends using the Ecological Metadata Language (EML) for datasets and Darwin Core for occurrence data.

REUSABLE

GBIF require creative common data licenses (CC0, CC BY, or CC BY-NC). Provenance available from the GBIF portal.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GBIF | Global Biodiversity Information Facility
Free and open access to biodiversity data
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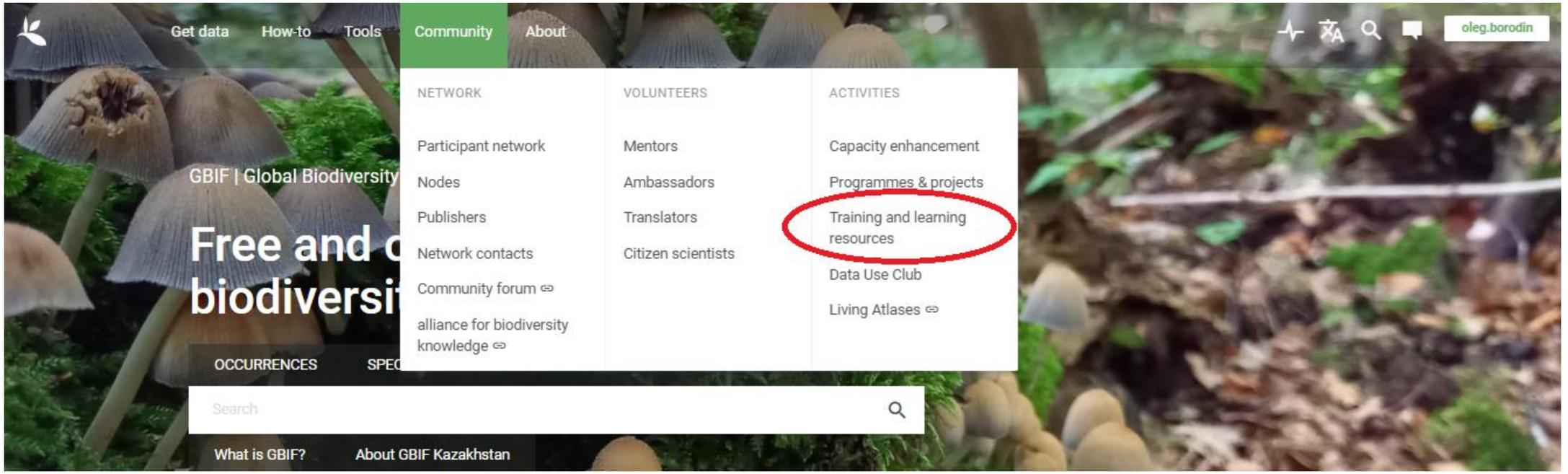
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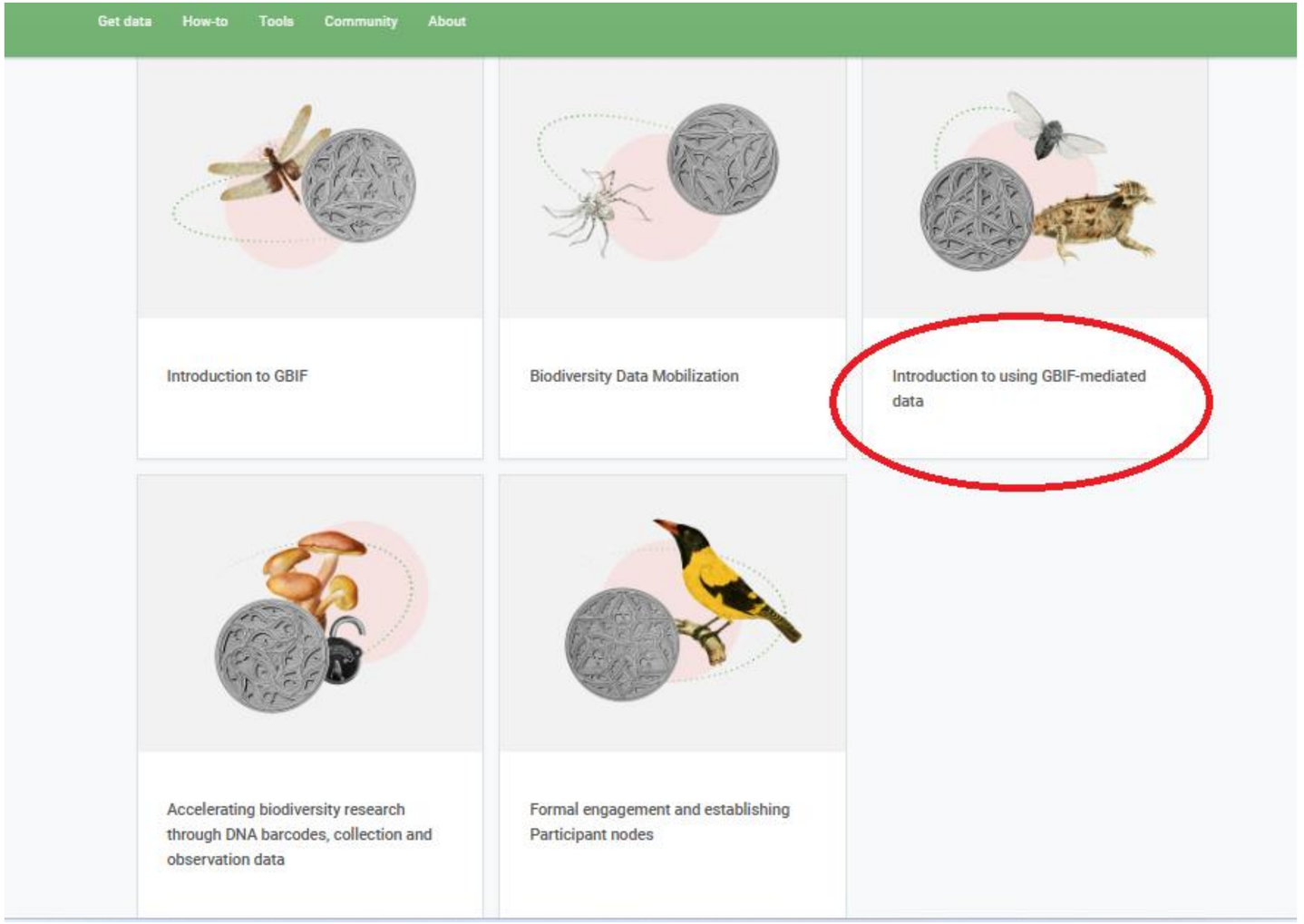
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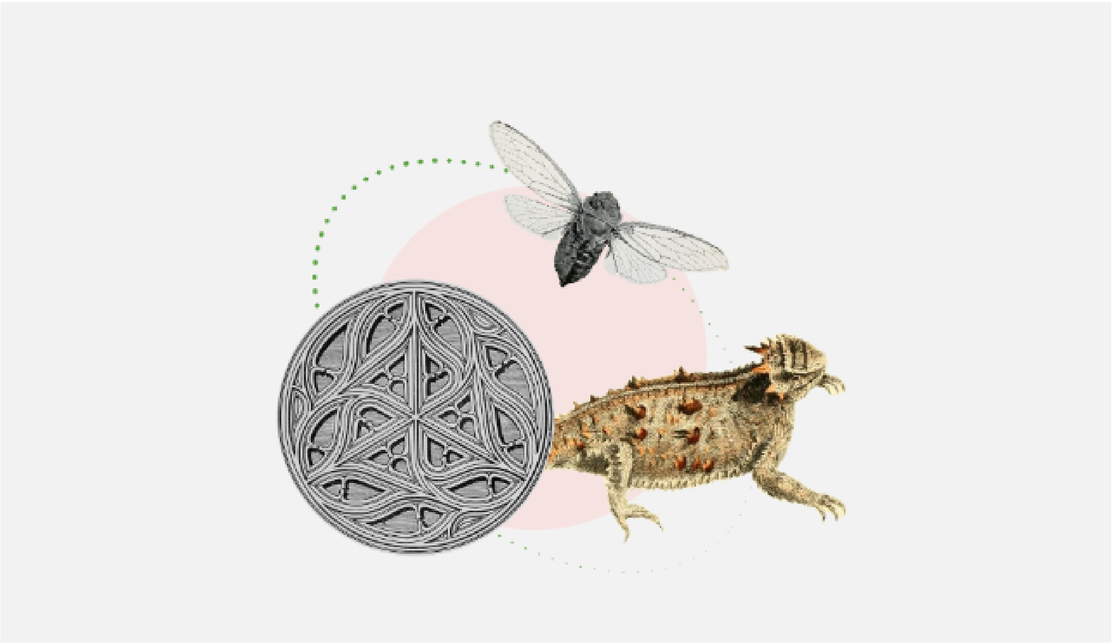
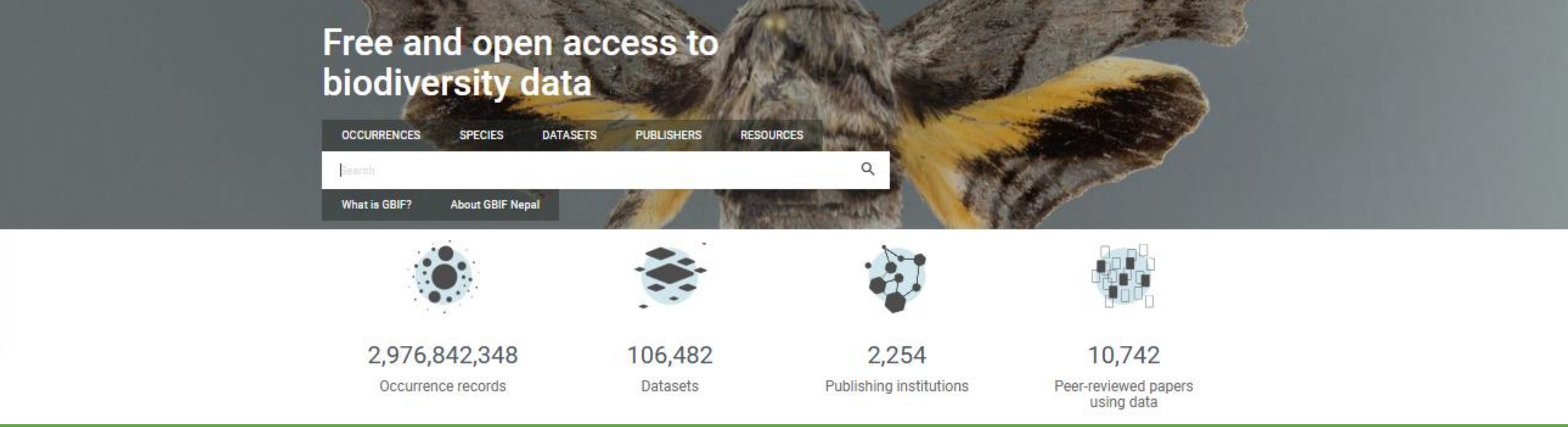
Biodiversity Data Mobilization
Introduction to using GBIF-mediated data
Accelerating biodiversity research through DNA barcodes, collection and observation data
Formal engagement and establishing Participant nodes

Introduction to using GBIF-mediated data



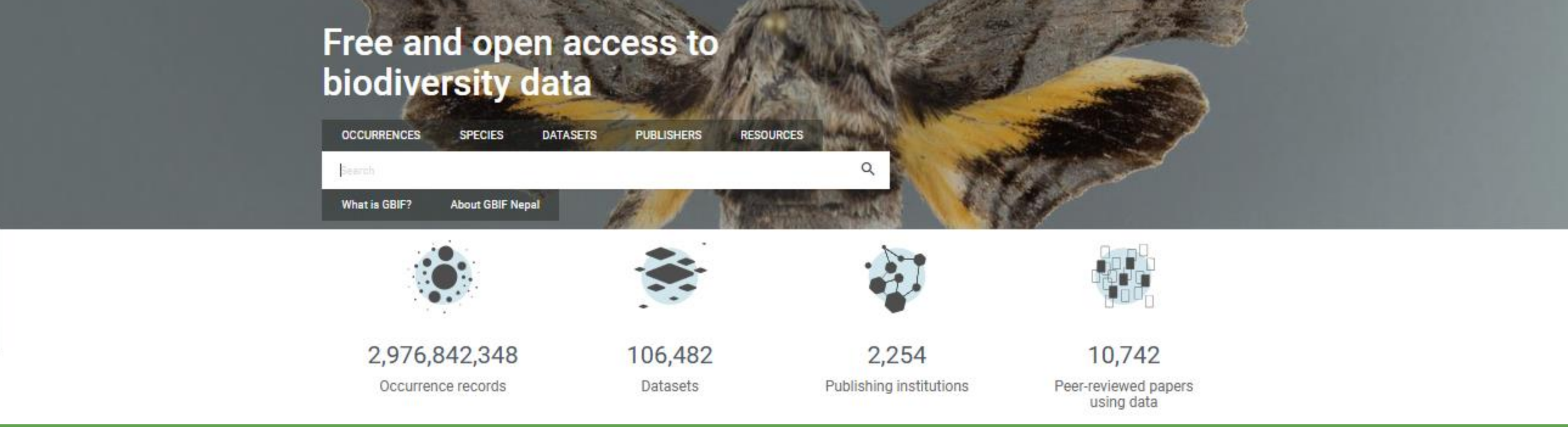


Data Access

Most common access points to GBIF-mediated data:

1. www.gbif.org: a website driven by open-source data engineering that offers advanced searching, data analytics, visualisations, and downloads for registered users in 10 languages.
2. R (www.r-project.org): packages, including rgbif and coordinatecleaner, for data analysis, processing and visualisation.

GBIF infrastructure is open-sourced at https://github.com/gbif/



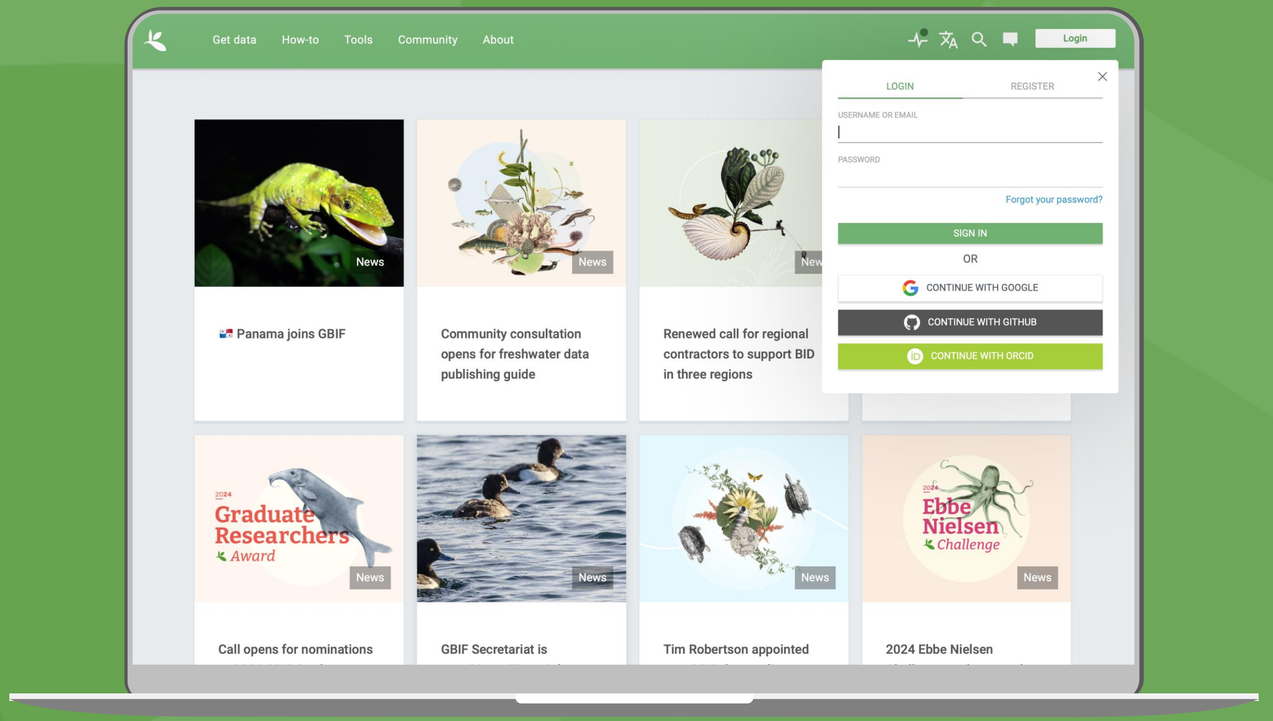
GOLDEN RULES OF GBIF-MEDIATED DATA USE

1. Must have an account on www.gbif.org
2. Must agree to the Data User Agreement - https://www.gbif.org/terms/data-user
3. Document how you process your data
4. Correctly cite the data you use
5. Deposit used data in a public repository

GBIF infrastructure is open-sourced at https://github.com/gbif/

GOLDEN RULES OF GBIF-MEDIATED DATA USE

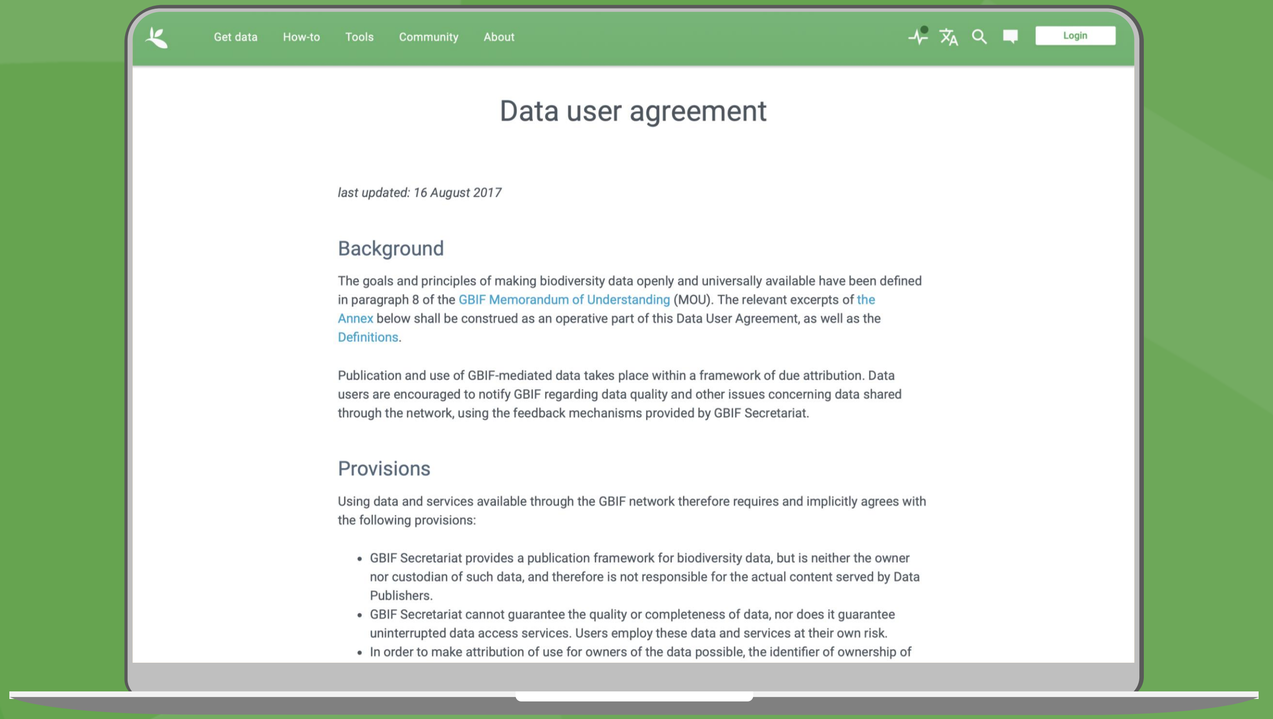
Must have an account on GBIF.org



GOLDEN RULES OF GBIF-MEDIATED DATA USE

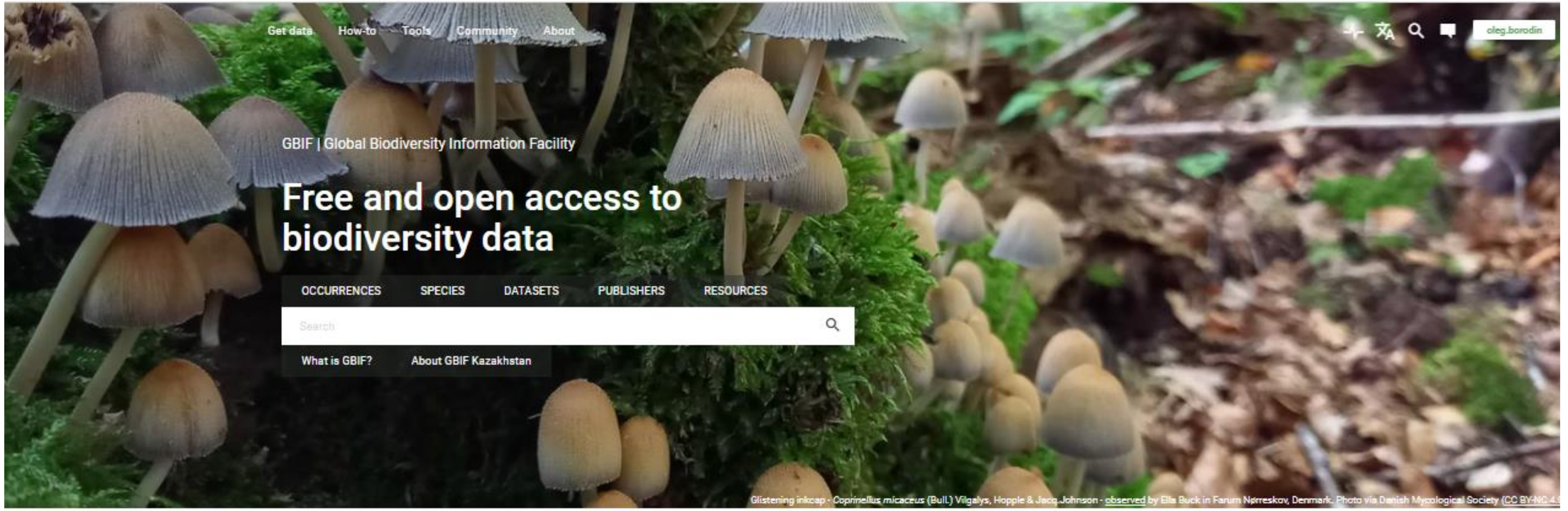
Must agree on GBIF the Data User Agreement

- Non-binding
- Sets out guiding principles of data use, including citation of data



https://www.gbif.org/terms/data-user

gbif.org



3 024 408 823
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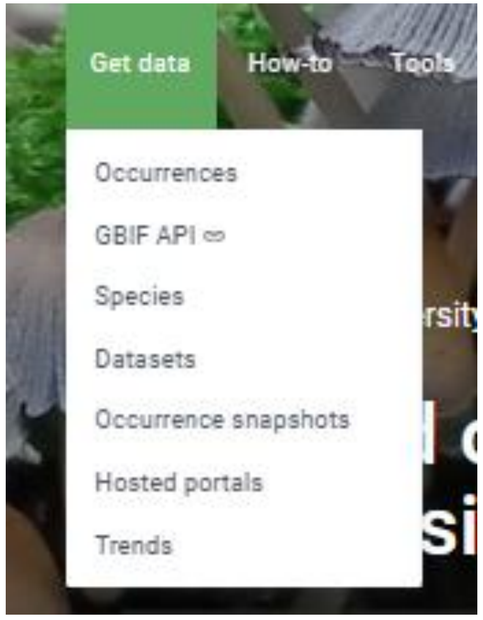
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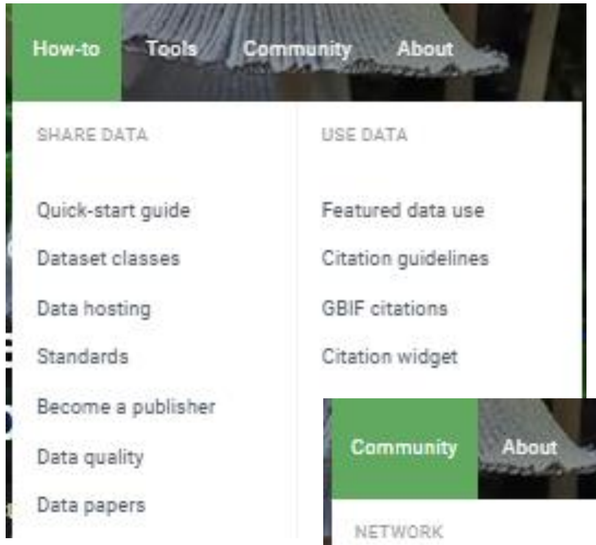
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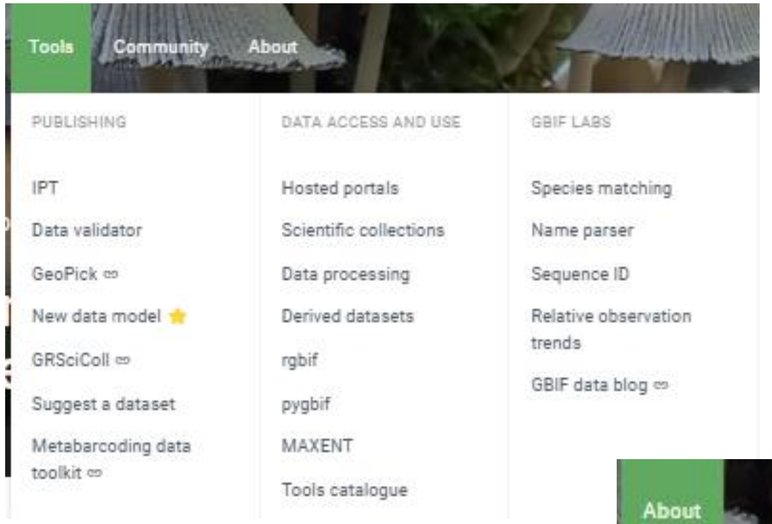
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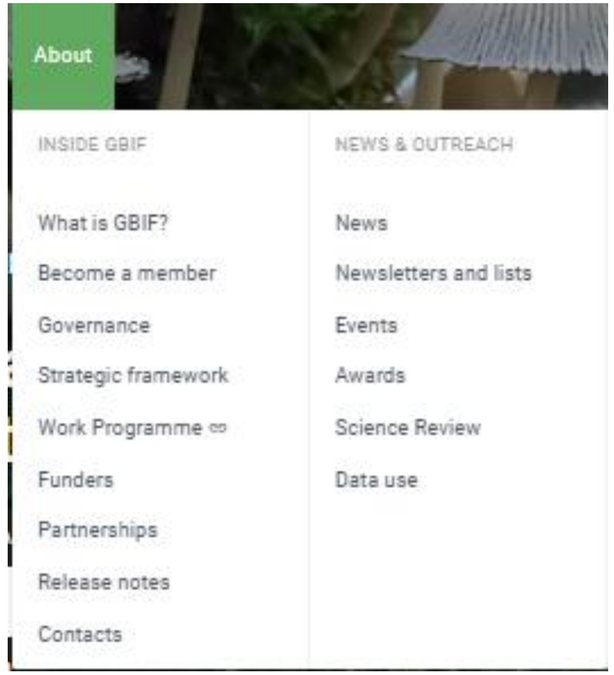
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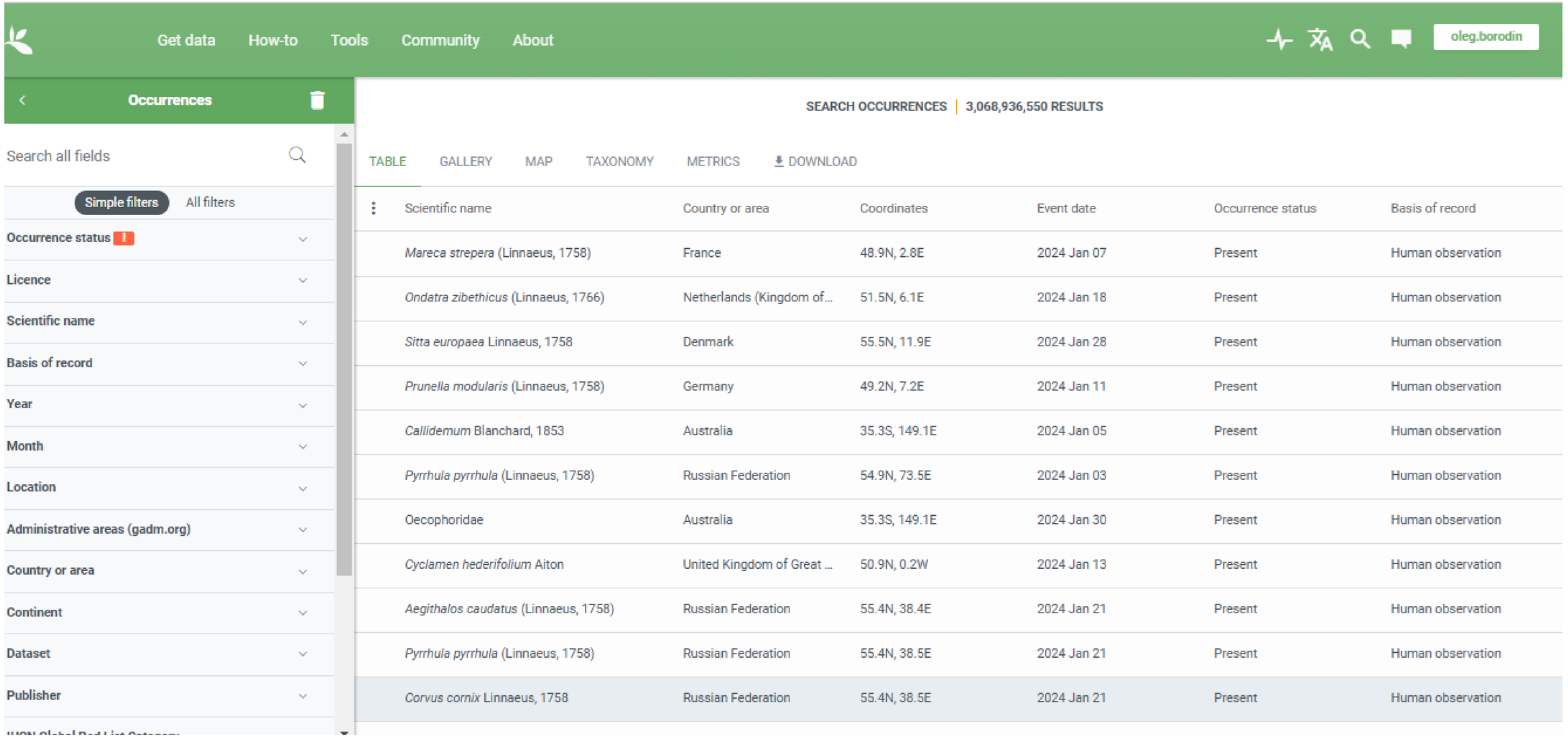
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Mareca strepera (Linnaeus, 1758)
France
48.9N, 2.8E
2024 Jan 07
Present
Human observation
Ondatra zibethicus (Linnaeus, 1766)
Netherlands (Kingdom of...
51.5N, 6.1E
2024 Jan 18
Present
Human observation
Sitta europaea Linnaeus, 1758
Denmark
55.5N, 11.9E
2024 Jan 28
Present
Human observation
Prunella modularis (Linnaeus, 1758)
Germany
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2024 Jan 11
Present
Human observation
Callidemum Blanchard, 1853
Australia
35.3S, 149.1E
2024 Jan 05
Present
Human observation
Pyrrhula pyrrhula (Linnaeus, 1758)
Russian Federation
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2024 Jan 03
Present
Human observation
Oecophoridae
Australia
35.3S, 149.1E
2024 Jan 30
Present
Human observation
Cyclamen hederifolium Aiton
United Kingdom of Great ...
50.9N, 0.2W
2024 Jan 13
Present
Human observation
Aegithalos caudatus (Linnaeus, 1758)
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55.4N, 38.4E
2024 Jan 21
Present
Human observation
Pyrrhula pyrrhula (Linnaeus, 1758)
Russian Federation
55.4N, 38.5E
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Human observation
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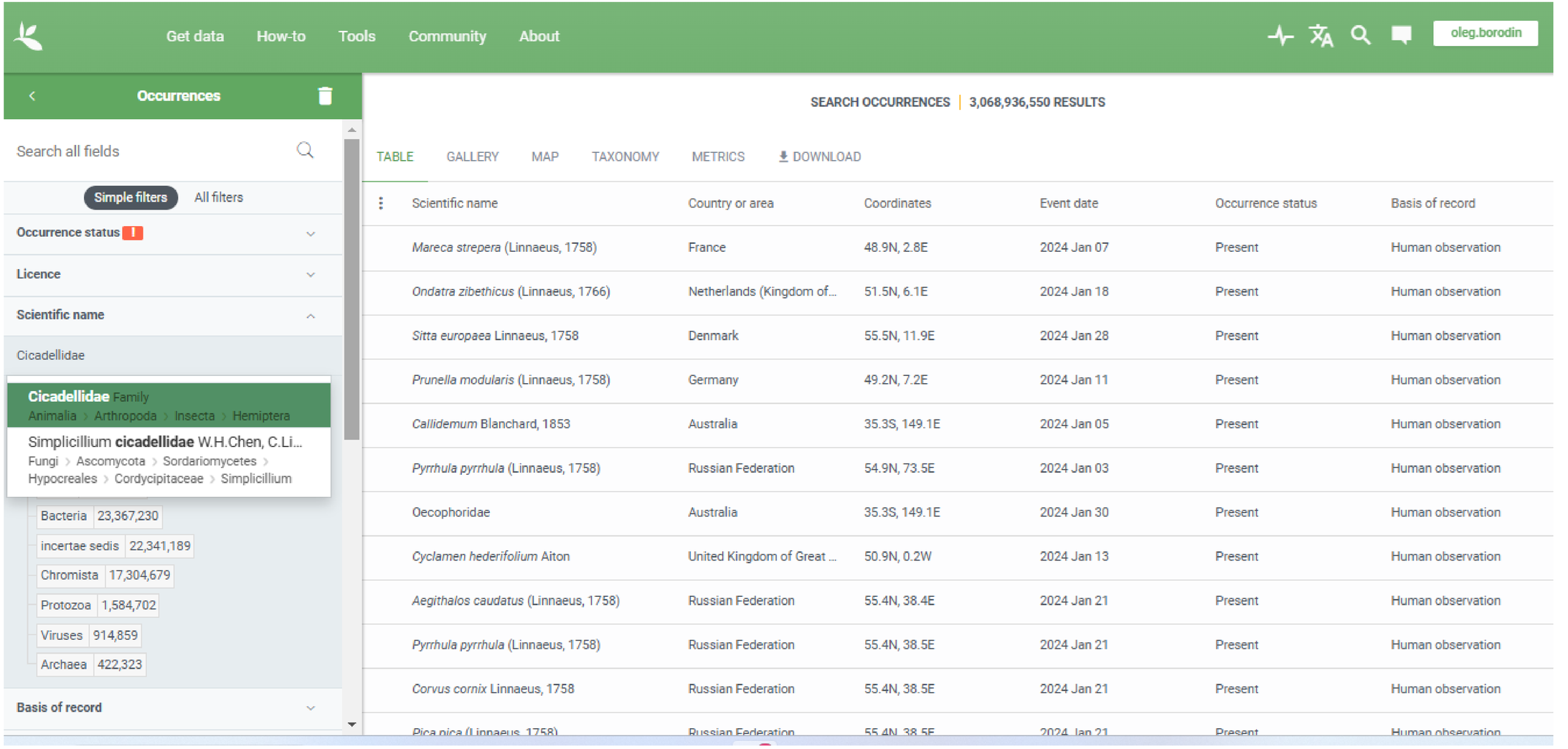
Russian Federation
55.4N, 38.5E
2024 Jan 21
Present
Human observation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Simplicillium cicadellidae W.H.Chen, C.Li...
Fungi › Ascomycota › Sordariomycetes › Hypocreales › Cordycipitaceae › Simplicillium
Bacteria 23,367,230
incertae sedis 22,341,189
Chromista 17,304,679
Protozoa 1,584,702
Viruses 914,859
Archaea 422,323
Basis of record
SEARCH OCCURRENCES | 3,068,936,550 RESULTS
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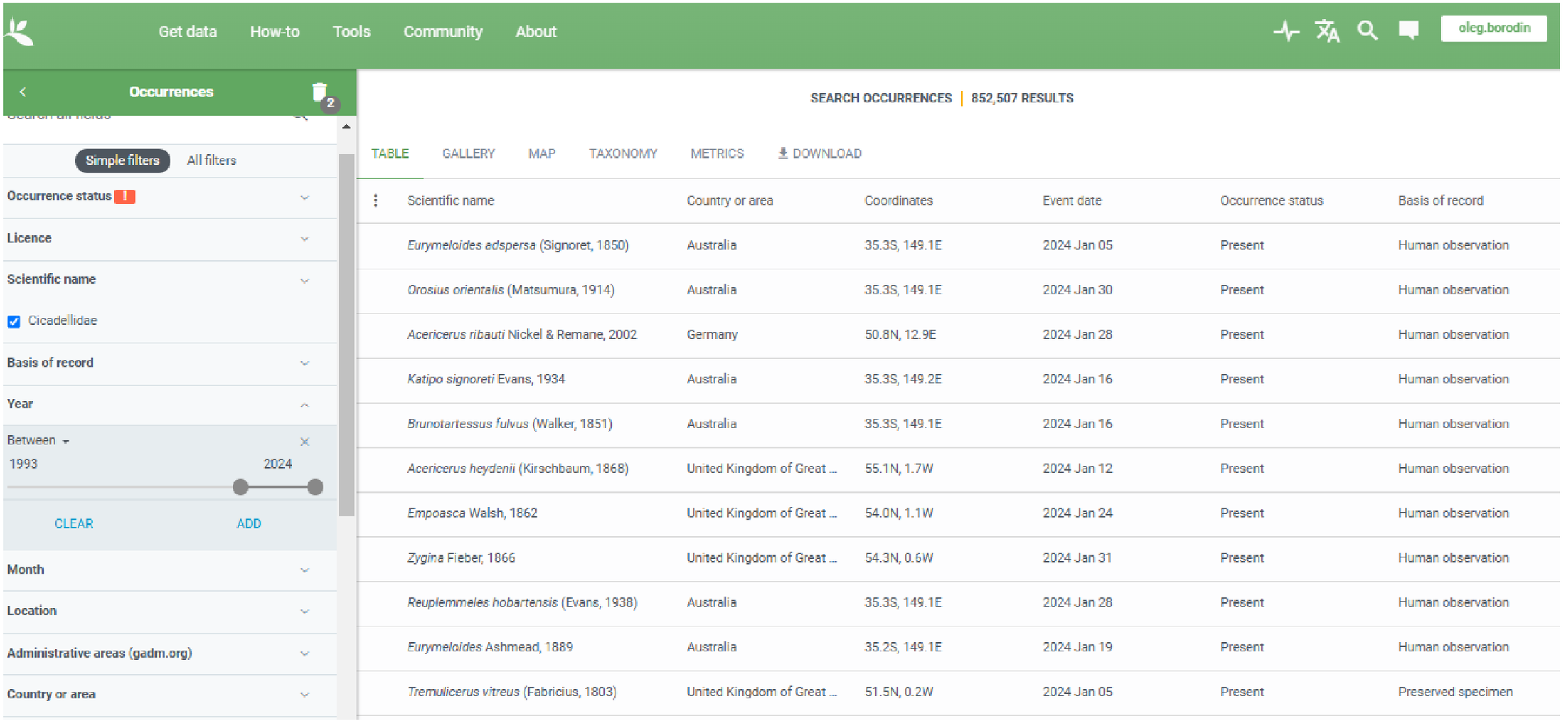
Scientific name
Country or area
Coordinates
Event date
Occurrence status
Basis of record
Mareca strepera (Linnaeus, 1758) France 48.9N, 2.8E 2024 Jan 07 Present Human observation
Ondatra zibethicus (Linnaeus, 1766) Netherlands (Kingdom of... 51.5N, 6.1E 2024 Jan 18 Present Human observation
Sitta europaea Linnaeus, 1758 Denmark 55.5N, 11.9E 2024 Jan 28 Present Human observation
Prunella modularis (Linnaeus, 1758) Germany 49.2N, 7.2E 2024 Jan 11 Present Human observation
Callidemum Blanchard, 1853 Australia 35.3S, 149.1E 2024 Jan 05 Present Human observation
Pyrrhula pyrrhula (Linnaeus, 1758) Russian Federation 54.9N, 73.5E 2024 Jan 03 Present Human observation
Oecophoridae Australia 35.3S, 149.1E 2024 Jan 30 Present Human observation
Cyclamen hederifolium Aiton United Kingdom of Great ... 50.9N, 0.2W 2024 Jan 13 Present Human observation
Aegithalos caudatus (Linnaeus, 1758) Russian Federation 55.4N, 38.4E 2024 Jan 21 Present Human observation
Pyrrhula pyrrhula (Linnaeus, 1758) Russian Federation 55.4N, 38.5E 2024 Jan 21 Present Human observation
Corvus cornix Linnaeus, 1758 Russian Federation 55.4N, 38.5E 2024 Jan 21 Present Human observation
Pica pica (Linnaeus, 1758) Russian Federation 55.4N, 38.5E 2024 Jan 21 Present Human observation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Cicadellidae
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Between
1993
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Administrative areas (gadm.org)
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Country or area
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Eurymeloides adspersa (Signoret, 1850)
Australia
35.3S, 149.1E
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Present
Human observation
Orosius orientalis (Matsumura, 1914)
Australia
35.3S, 149.1E
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Human observation
Acericerus ribauti Nickel & Remane, 2002
Germany
50.8N, 12.9E
2024 Jan 28
Present
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Katipo signoreti Evans, 1934
Australia
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Present
Human observation
Brunotartessus fulvus (Walker, 1851)
Australia
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2024 Jan 16
Present
Human observation
Acericerus heydenii (Kirschbaum, 1868)
United Kingdom of Great ...
55.1N, 1.7W
2024 Jan 12
Present
Human observation
Empoasca Walsh, 1862
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2024 Jan 24
Present
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54.3N, 0.6W
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Human observation
Reuplemmeles hobartensis (Evans, 1938)
Australia
35.3S, 149.1E
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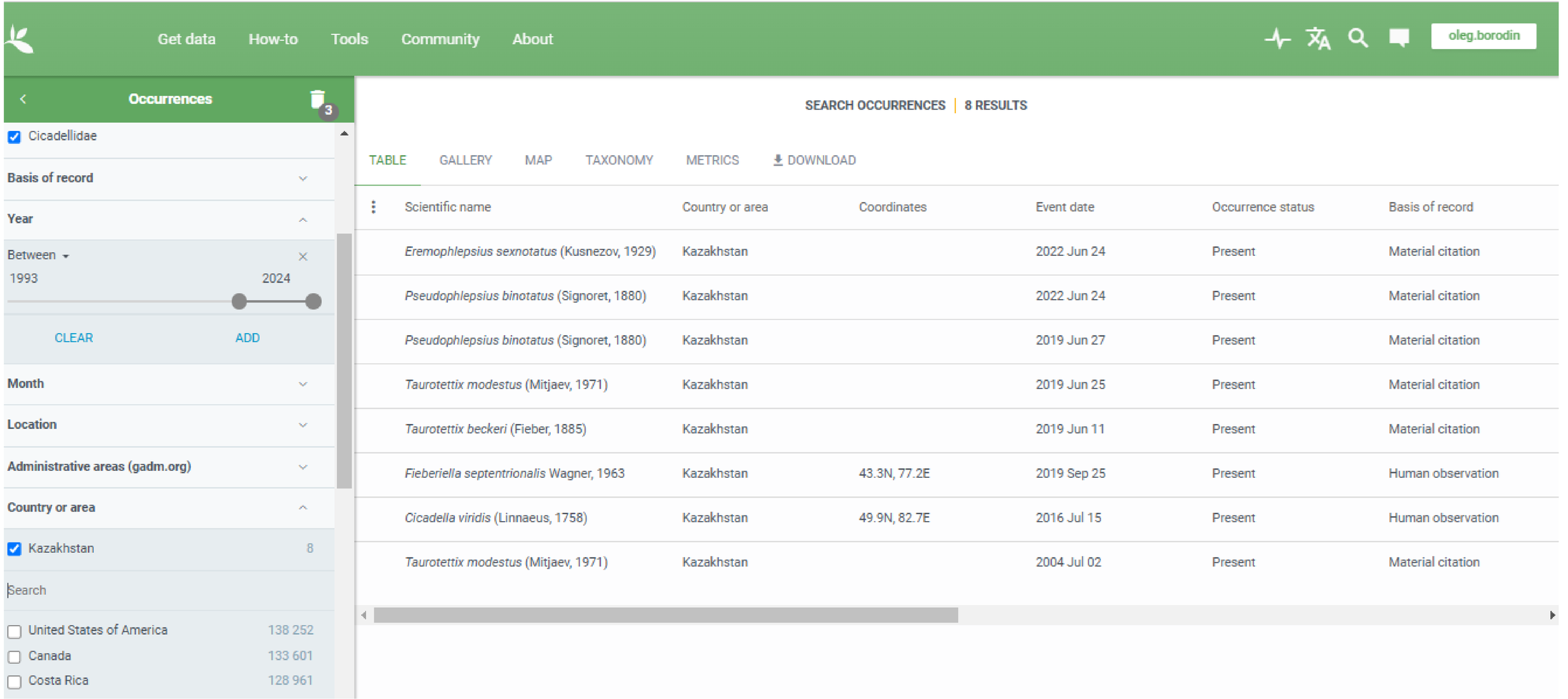
Present
Human observation
Eurymeloides Ashmead, 1889
Australia
35.2S, 149.1E
2024 Jan 19
Present
Human observation
Tremulicerus vitreus (Fabricius, 1803)
United Kingdom of Great ...
51.5N, 0.2W
2024 Jan 05
Present
Preserved specimen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Kazakhstan 8
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Scientific name
Country or area
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Event date
Occurrence status
Basis of record
Eremophlepsius sexnotatus (Kusnezov, 1929) Kazakhstan 2022 Jun 24 Present Material citation
Pseudophlepsius binotatus (Signoret, 1880) Kazakhstan 2022 Jun 24 Present Material citation
Pseudophlepsius binotatus (Signoret, 1880) Kazakhstan 2019 Jun 27 Present Material citation
Taurotettix modestus (Mitjaev, 1971) Kazakhstan 2019 Jun 25 Present Material citation
Taurotettix beckeri (Fieber, 1885) Kazakhstan 2019 Jun 11 Present Material citation
Fieberiella septentrionalis Wagner, 1963 Kazakhstan 43.3N, 77.2E 2019 Sep 25 Present Human observation
Cicadella viridis (Linnaeus, 1758) Kazakhstan 49.9N, 82.7E 2016 Jul 15 Present Human observation
Taurotettix modestus (Mitjaev, 1971) Kazakhstan 2004 Jul 02 Present Material citation

SEARCH OCCURRENCES | 8 RESULTS

TABLE GALLERY MAP TAXONOMY METRICS DOWNLOAD

TAXONOMIC DISTRIBUTION OF OCCURRENCES

Explore Major groups

- Animalia 8
  - Chordata 250,792
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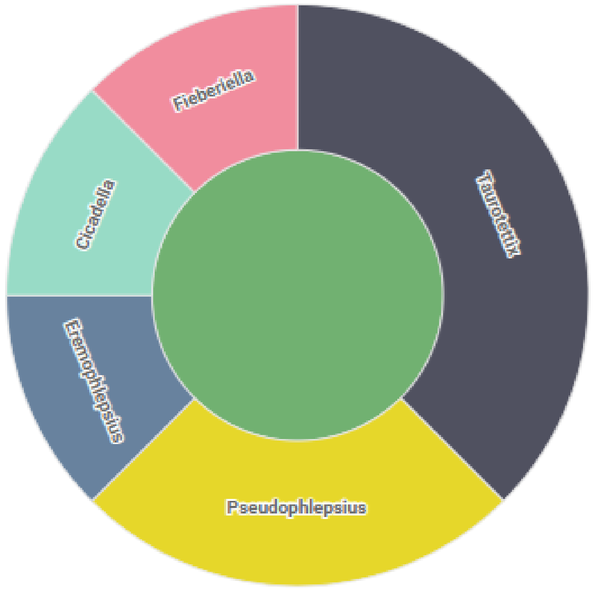
  - Bryozoa 8
  - Unknown phylum -319,059

TAXONOMIC DISTRIBUTION OF OCCURRENCES



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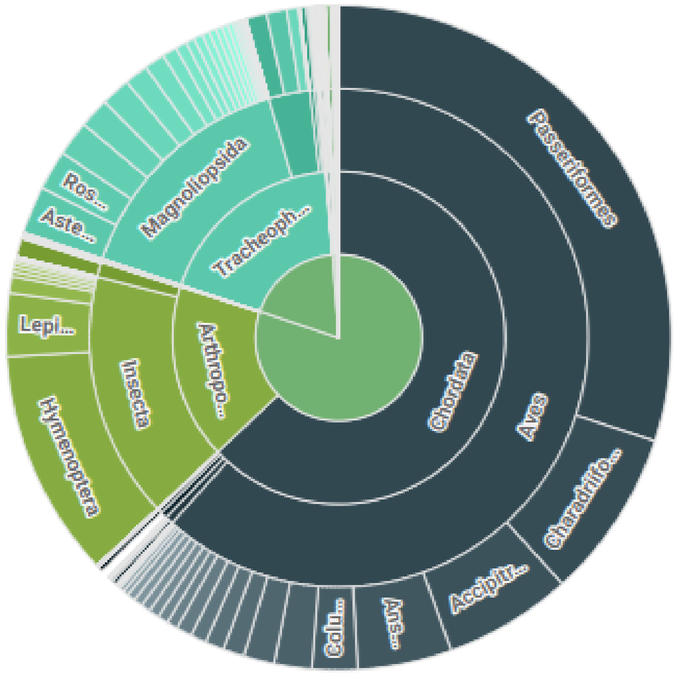

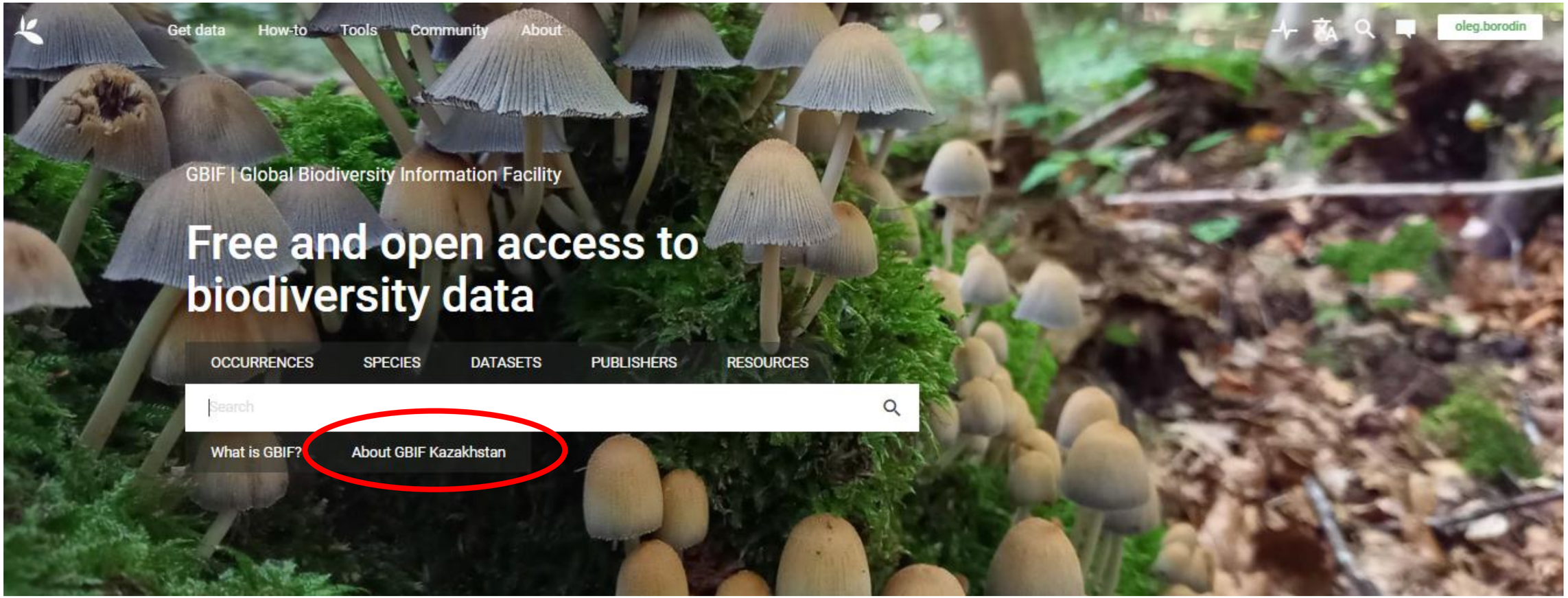
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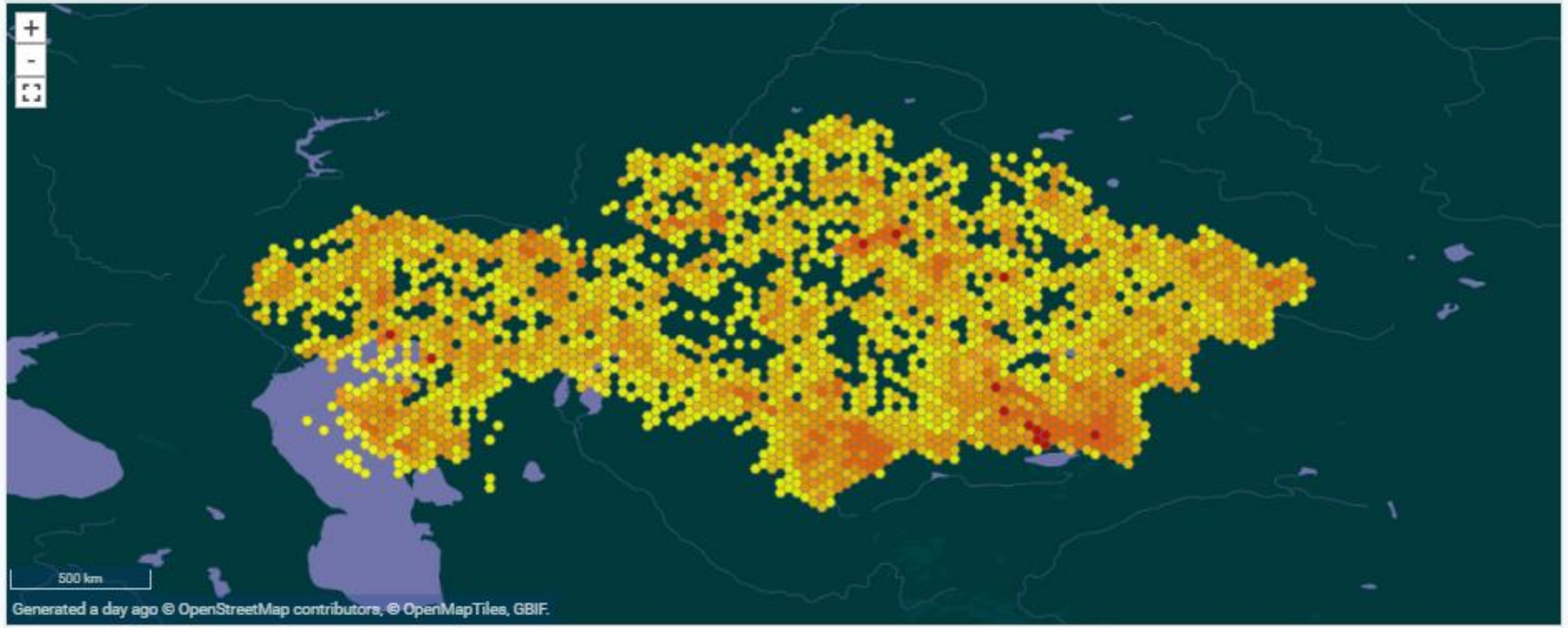
DATA ABOUT KAZAKHSTAN

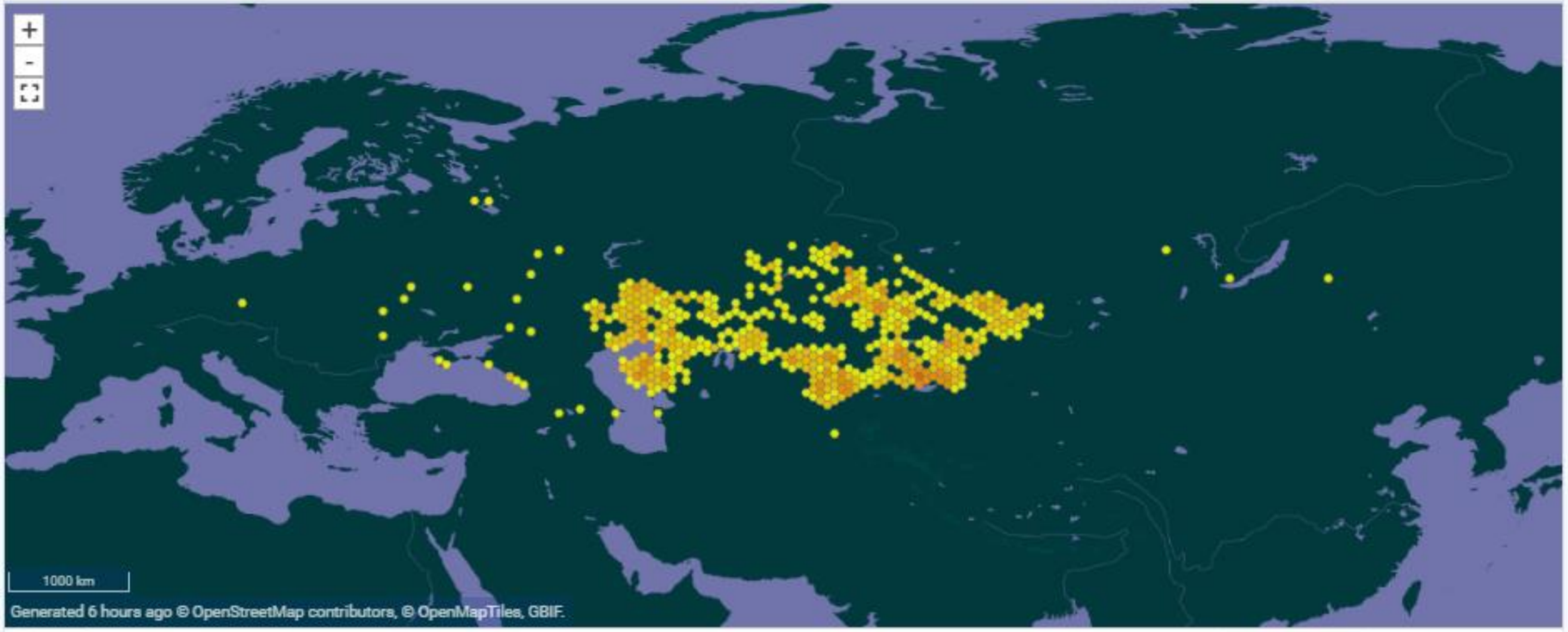
540,872	793	44	305
Occurrences	Datasets	Countries and areas contribute data	Publishers

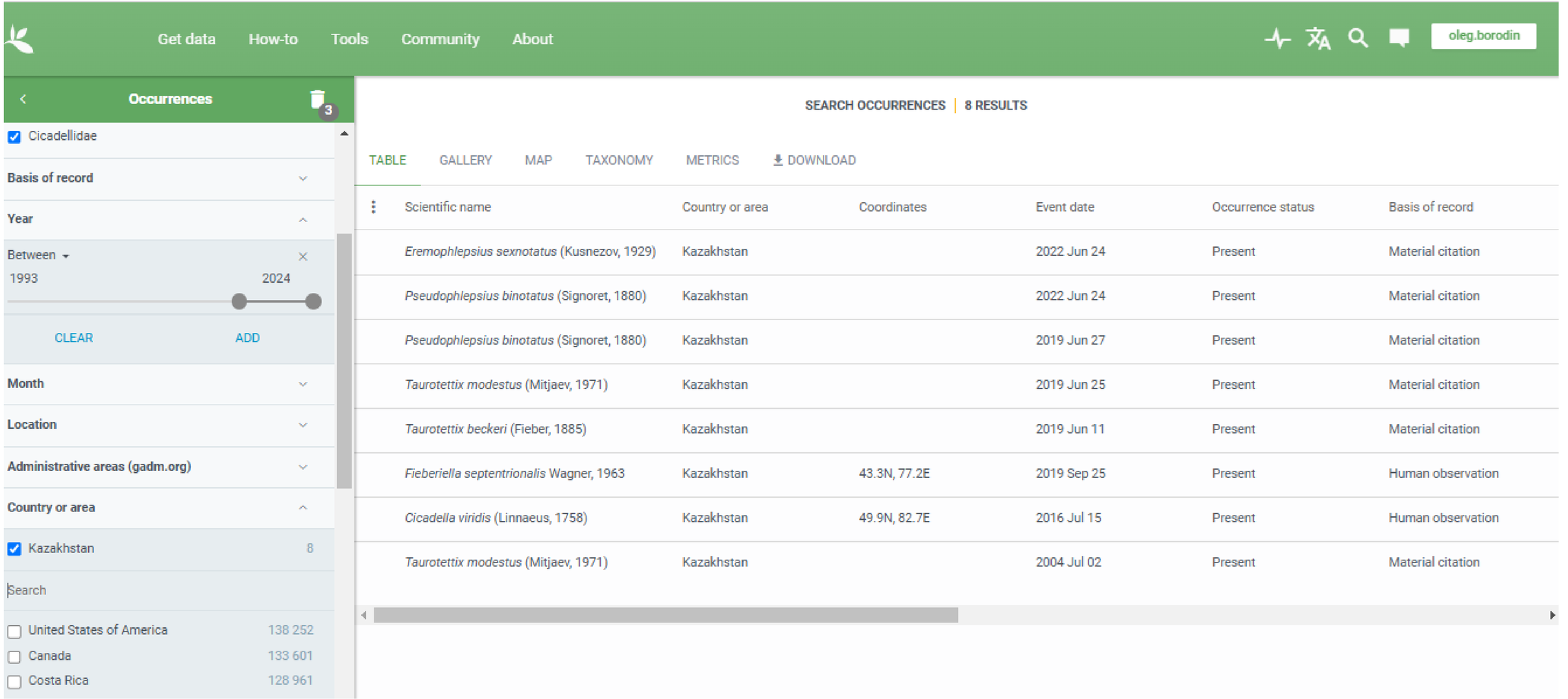


Any year | 1765 - 2024 | EXPLORE AREA

DATA FROM KAZAKHSTAN

221,986	20	15	10
Published occurrences	Published datasets	Countries and areas covered by data from Kazakhstan	Publishers from Kazakhstan

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Eremophlepsius sexnotatus (Kusnezov, 1929) Kazakhstan 2022 Jun 24 Present Material citation
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Pseudophlepsius binotatus (Signoret, 1880) Kazakhstan 2019 Jun 27 Present Material citation
Taurotettix modestus (Mitjaev, 1971) Kazakhstan 2019 Jun 25 Present Material citation
Taurotettix beckeri (Fieber, 1885) Kazakhstan 2019 Jun 11 Present Material citation
Fieberiella septentrionalis Wagner, 1963 Kazakhstan 43.3N, 77.2E 2019 Sep 25 Present Human observation
Cicadella viridis (Linnaeus, 1758) Kazakhstan 49.9N, 82.7E 2016 Jul 15 Present Human observation
Taurotettix modestus (Mitjaev, 1971) Kazakhstan 2004 Jul 02 Present Material citation

	Raw data	Interpreted data	Multimedia	Coordinates	Format	Estimated data size
SIMPLE	✗	✓	✗	✓ (if available)	Tab-delimited CSV (for use in Excel, etc.)	**4 KB** (952 Bytes zipped for download)
DARWIN CORE ARCHIVE	✓	✓	✓ (links)	✓ (if available)	Tab-delimited CSV (for use in Excel, etc.)	**13 KB** (3 KB zipped for download)
SPECIES LIST	✗	✓	✗	✗	Tab-delimited CSV (for use in Excel, etc.)	

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Year range: 2004–2022

With year: 100 %

With coordinates: 25 %

With taxon match: 100 %

Known issues

A part of the GBIF processing is to flag occurrences that have suspicious fields

6 Occurrence status inferred from individual count | 2 Continent derived from coordinates | 2 Taxon match fuzzy

	Raw data	Interpreted data	Multimedia	Coordinates	Format	Estimated data size
SIMPLE	✗	✓	✗	✓ (if available)	Tab-delimited CSV (for use in Excel, etc.)	**291 MB** (64 MB zipped for download)
DARWIN CORE ARCHIVE	✓	✓	✓ (links)	✓ (if available)	Tab-delimited CSV (for use in Excel, etc.)	**891 MB** (197 MB zipped for download)
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With coordinates: 76 %

With taxon match: 99.8 %

Known issues

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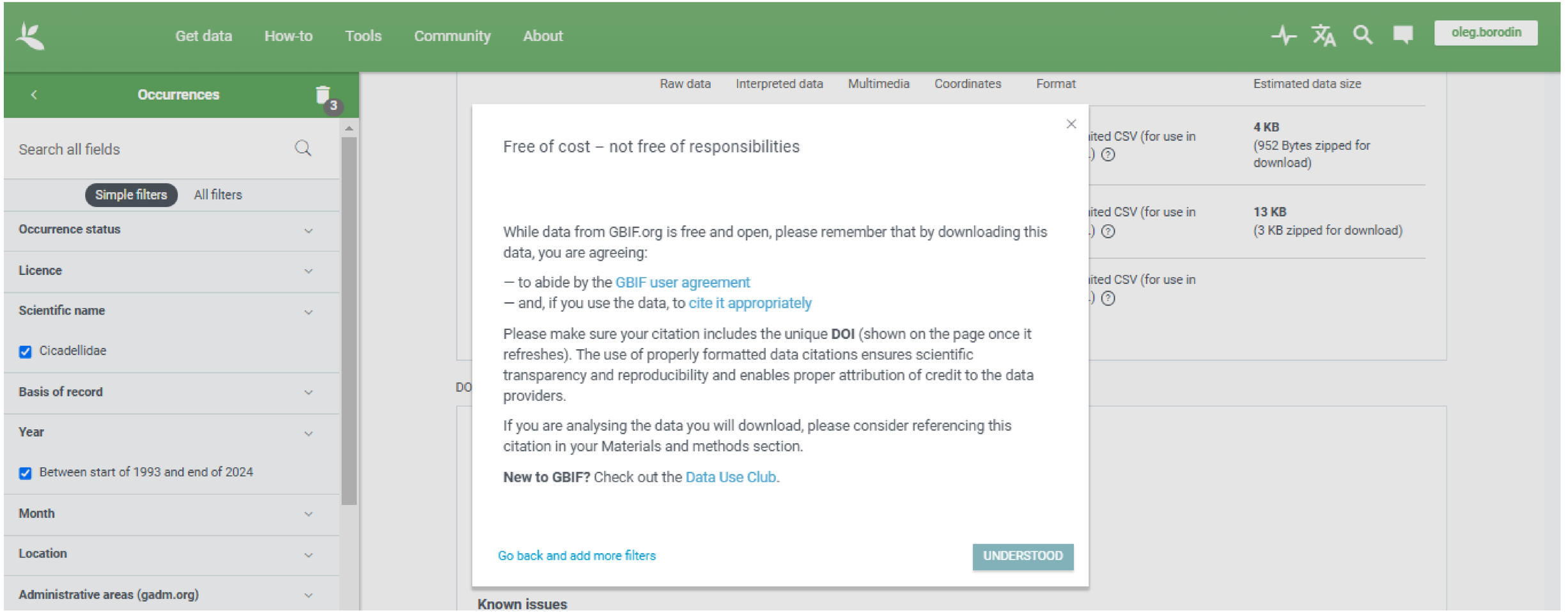
400 295 Continent derived from coordinates | 22 064 Occurrence status inferred from individual count | 15 877 Country derived from coordinates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Cicadellidae
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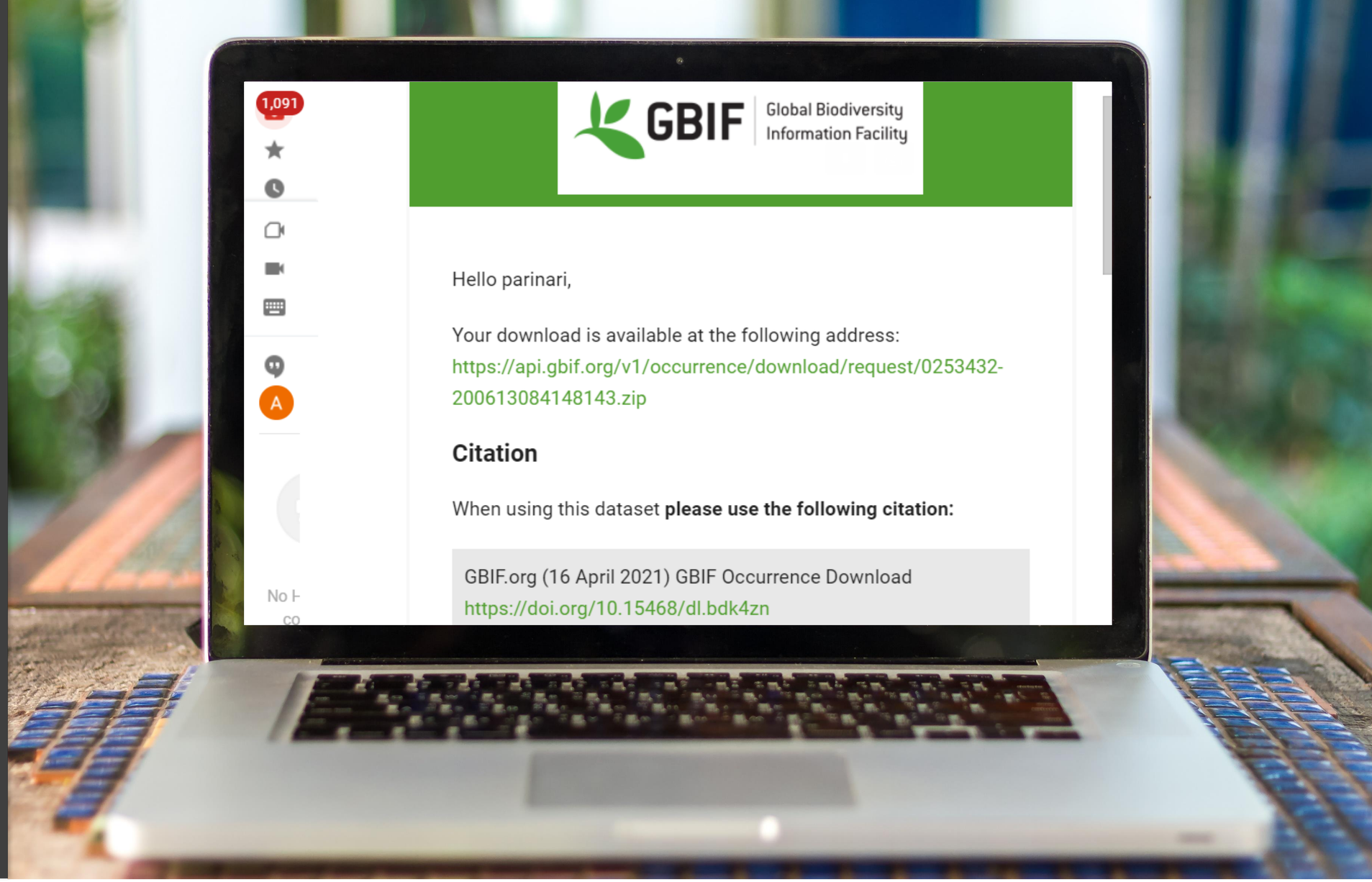

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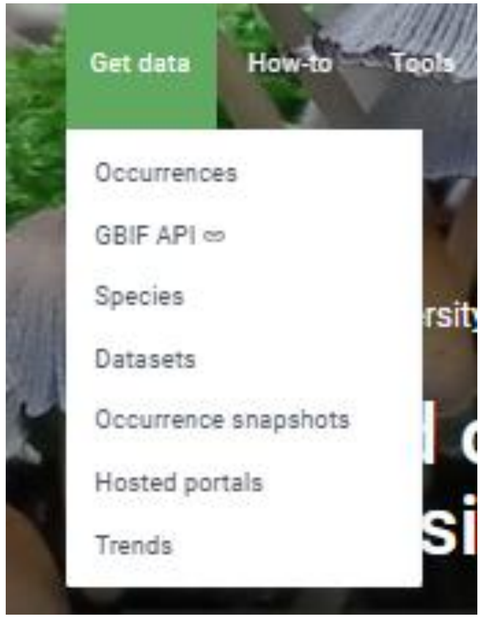
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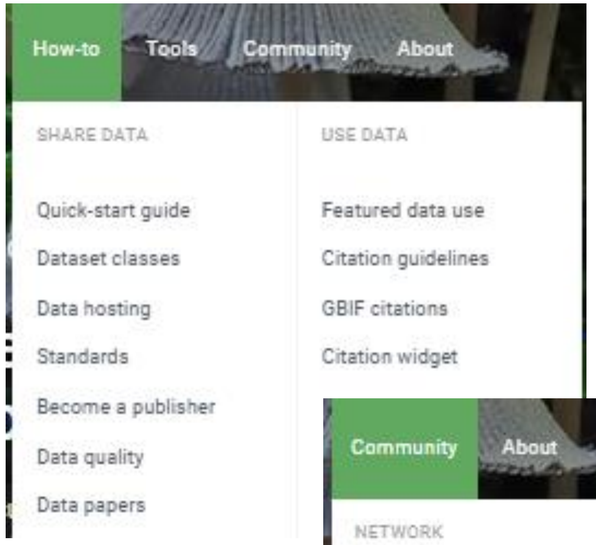
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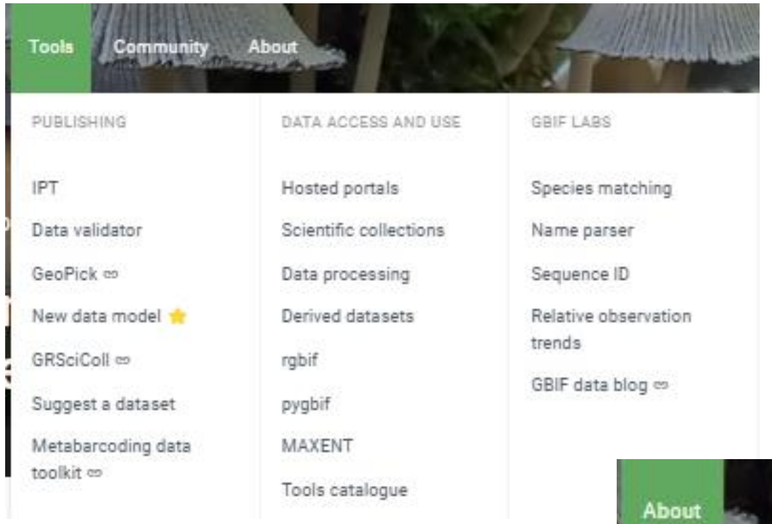
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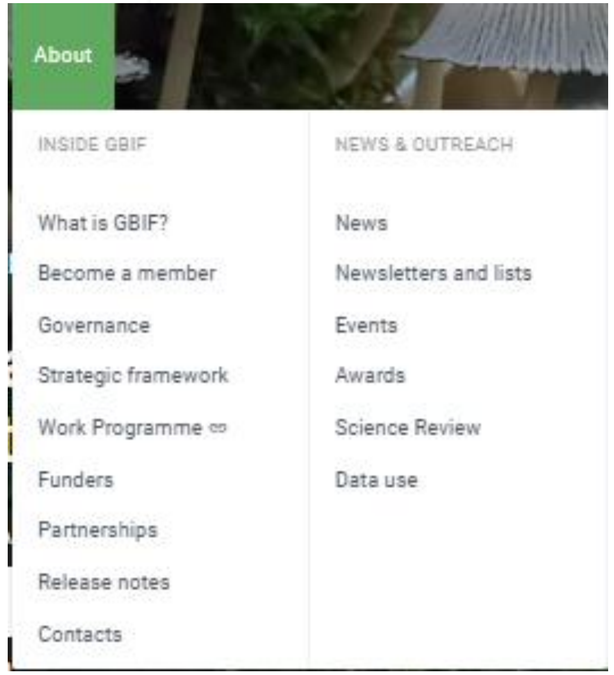
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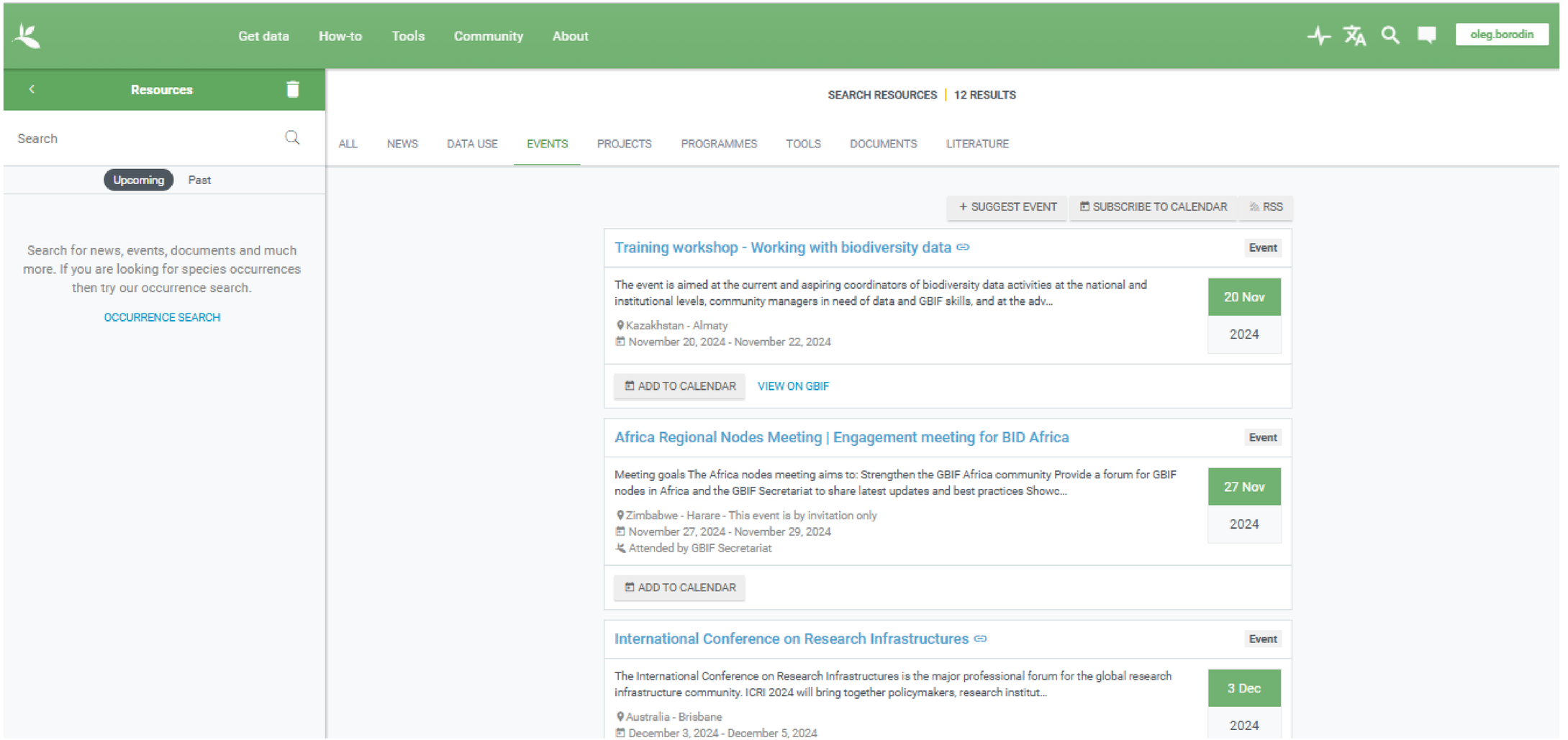
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Meeting goals The Africa nodes meeting aims to: Strengthen the GBIF Africa community Provide a forum for GBIF nodes in Africa and the GBIF Secretariat to share latest updates and best practices Showc...
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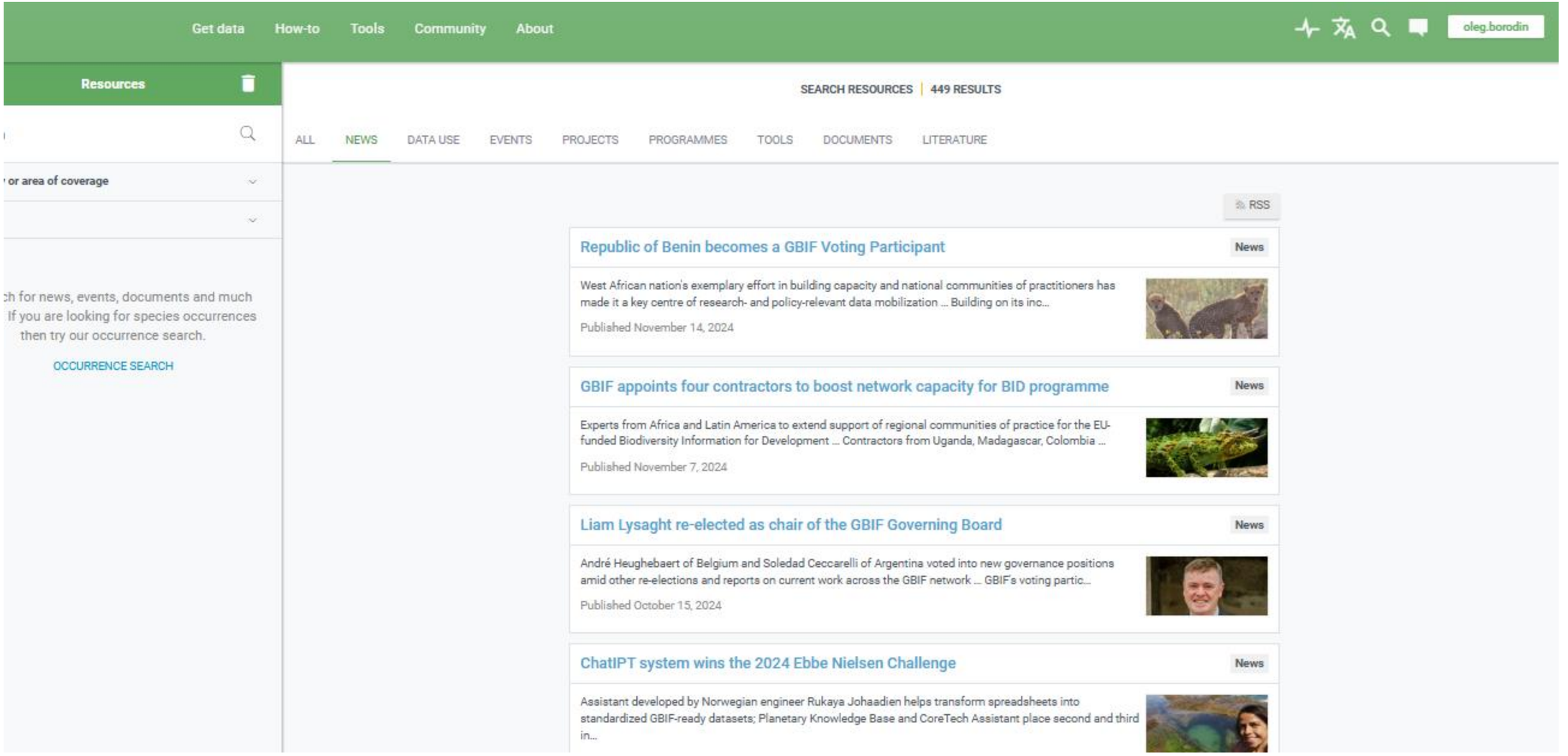
3 Dec
2024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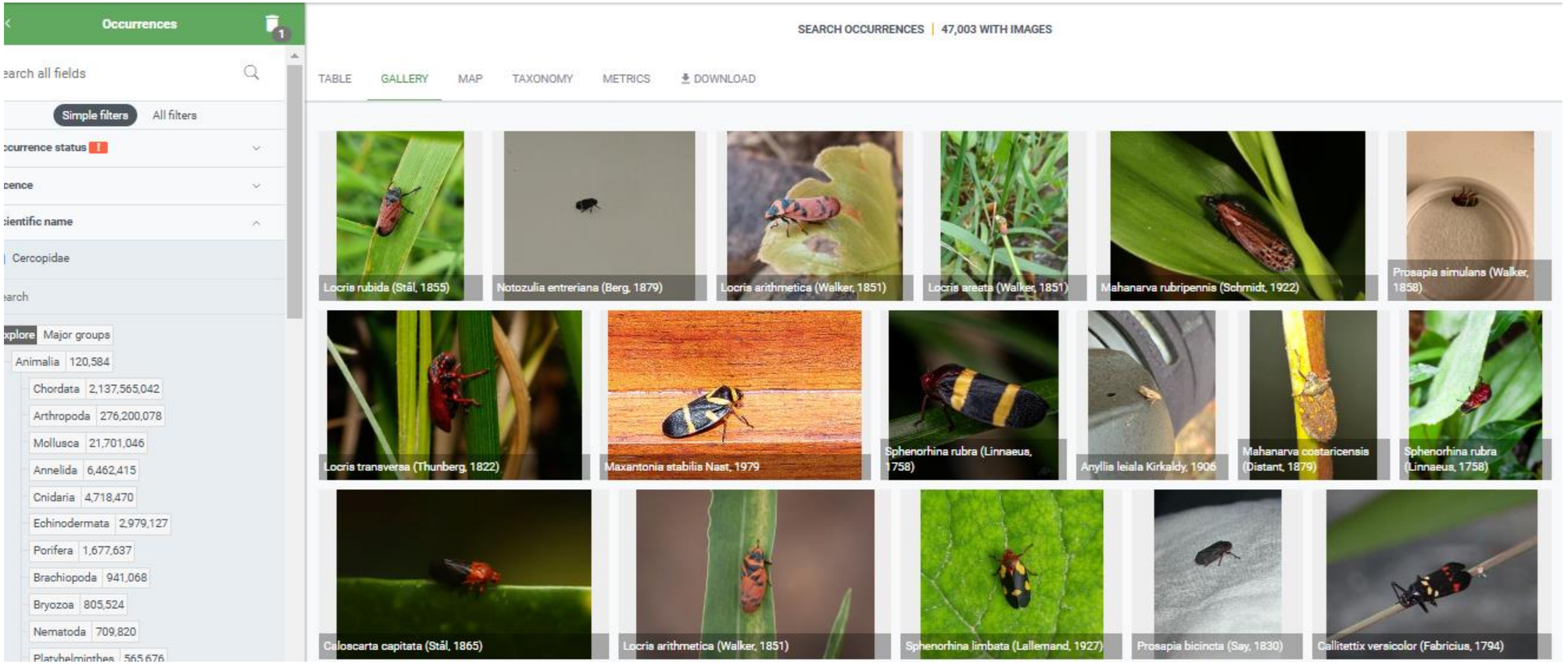

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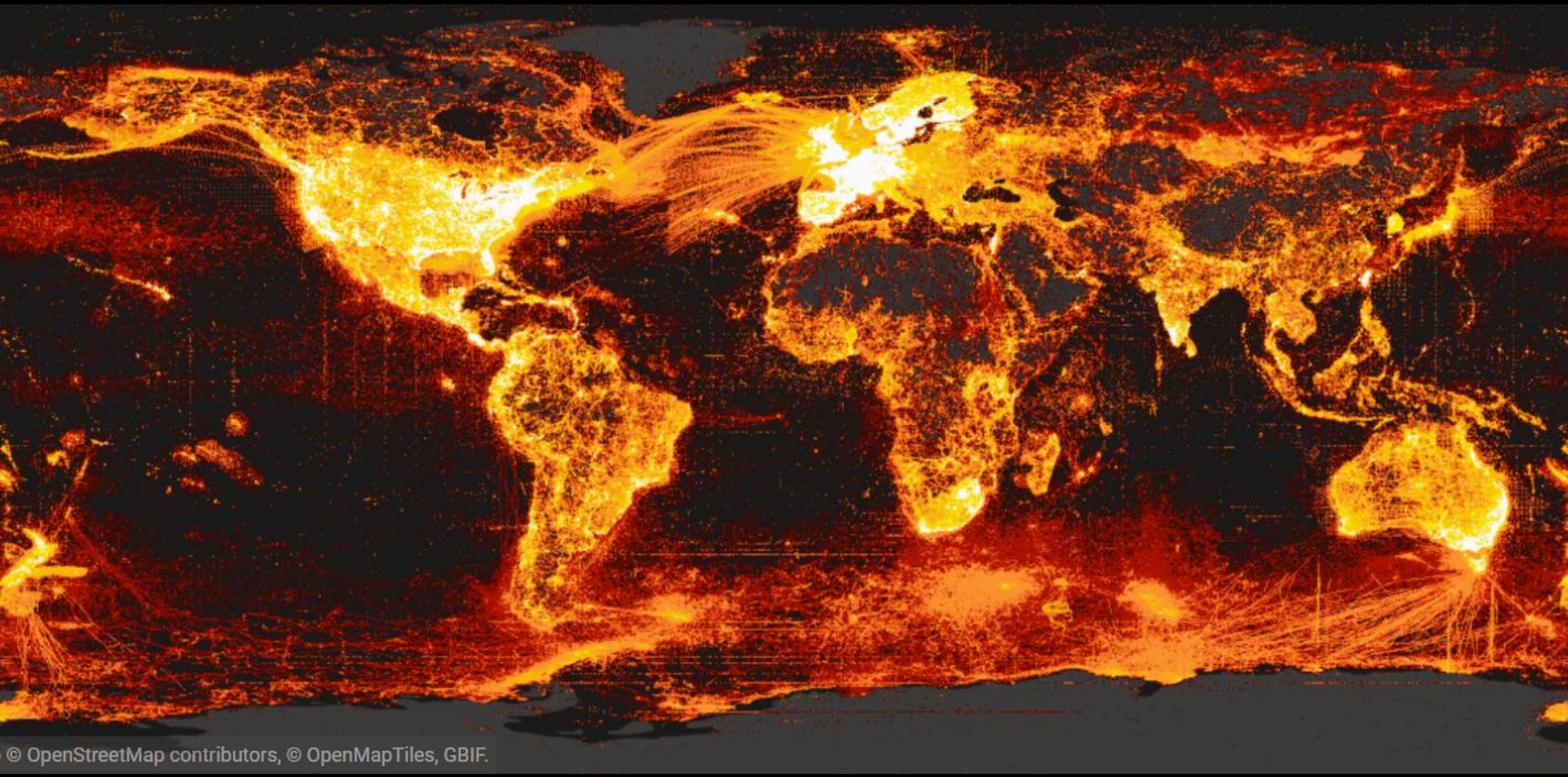
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Data citation and GBIF powered literature

Dmitry Schigel | Scientific officer

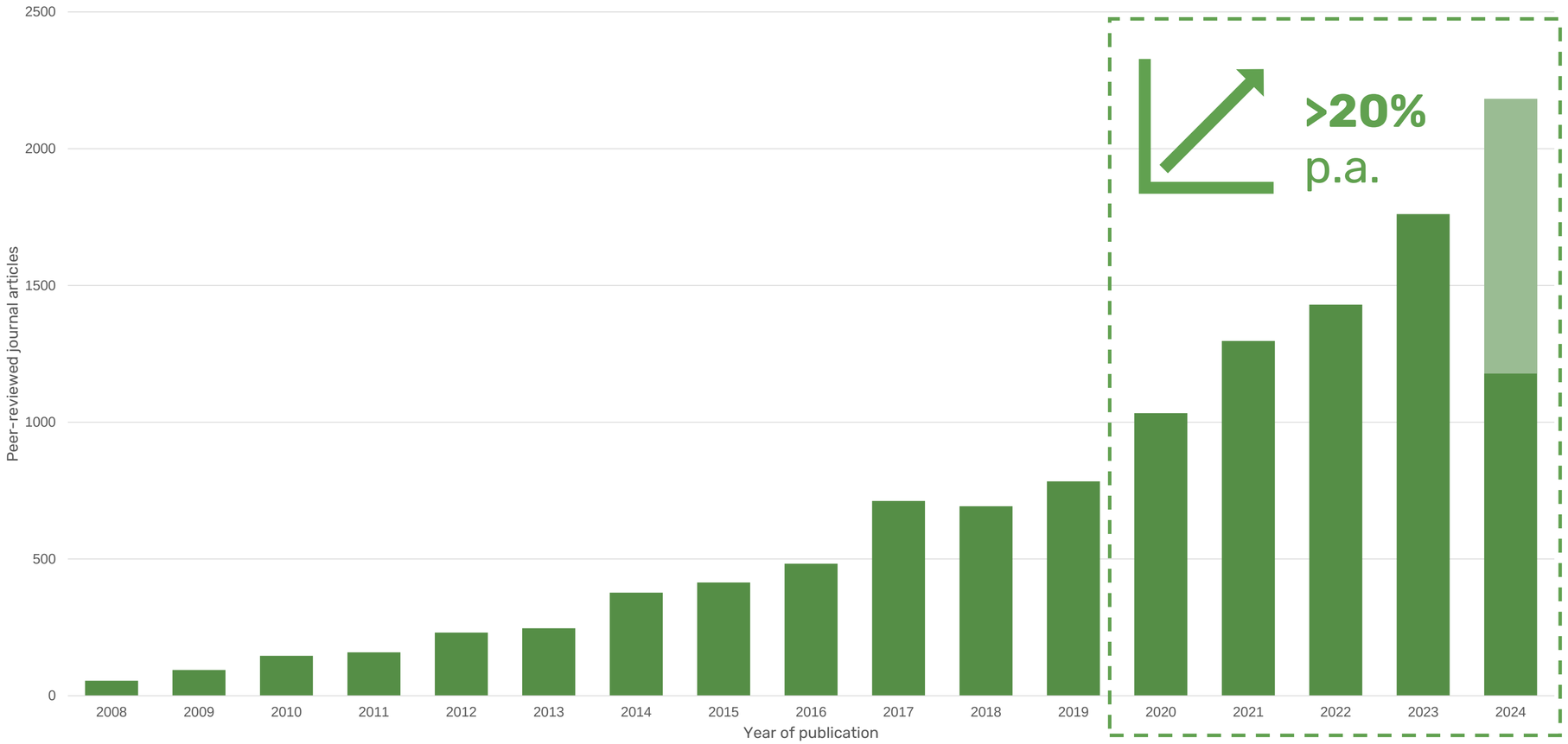
Biodiversity data in montane and arid Eurasia
Almaty, Kazakhstan

18-19 November 2024

Why track citations?

- Knowledge of where, when, how and by whom data is used
- Evidence of the impact
- Credit to data publishers
- Started in 2010
- Optimized, streamlined and automated since 2017

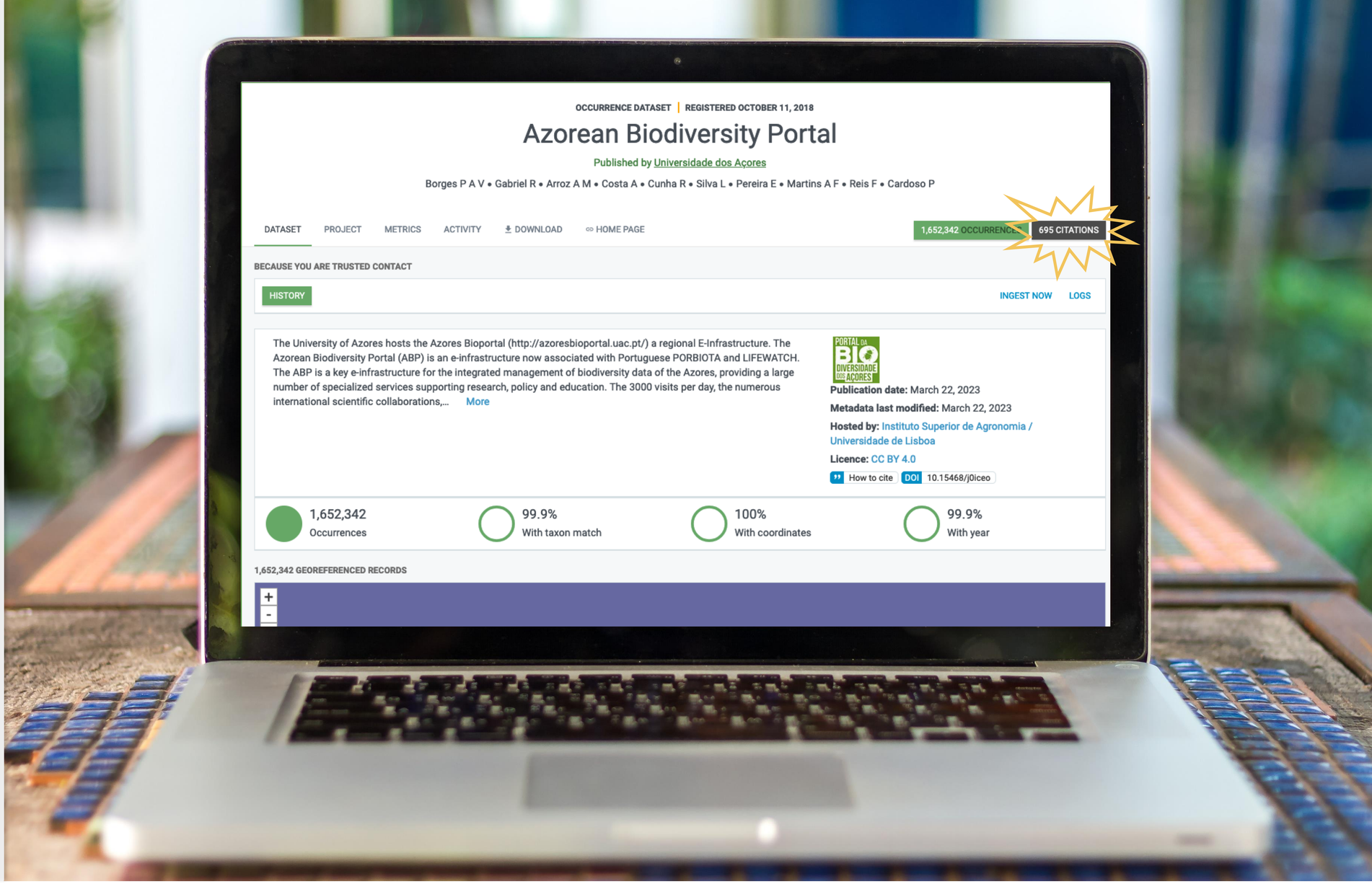
Use of GBIF-mediated data in research



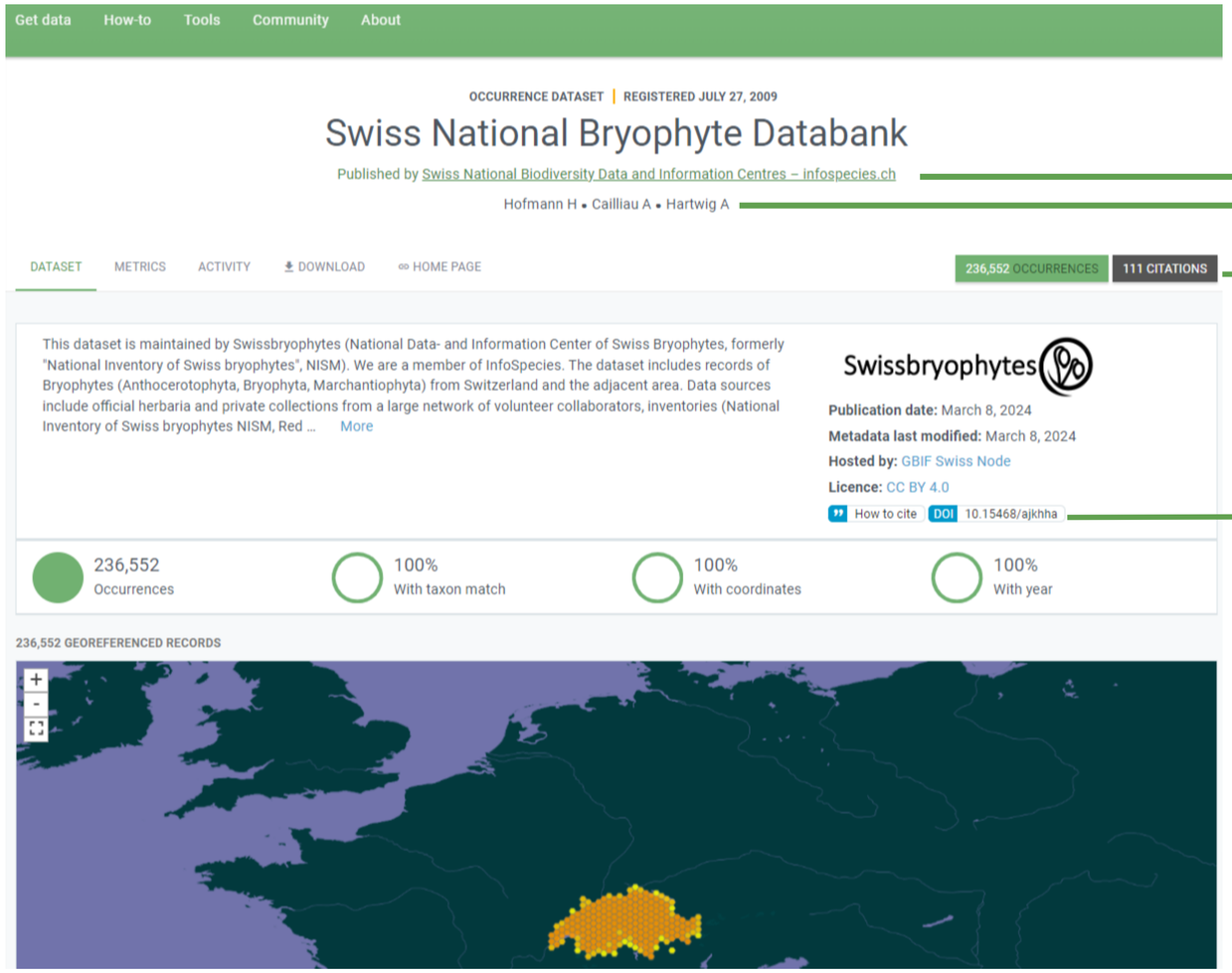
Data citations: All about the DOIs

- **DOIs** for datasets
- **DOIs** for downloads
- **DOIs** for derived datasets

- Paper ➞ (download) ➡️ dataset(s)
- Dataset citations



Data in 108,709 datasets: attribution, credit and affiliation

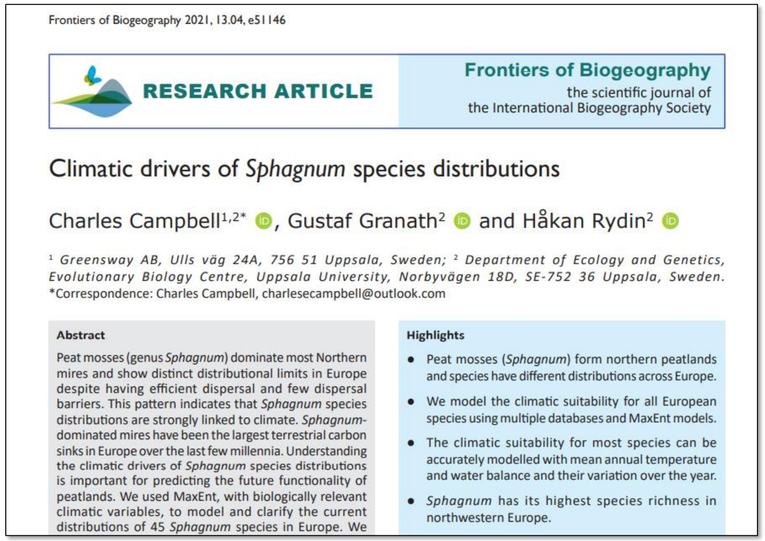


1 **Affiliation**

2 **Authorship**

3 **Data citations**

4 **DOI**



Frontiers of Biogeography 2021, 13.04, e51146

RESEARCH ARTICLE

Frontiers of Biogeography
the scientific journal of
the International Biogeography Society

Climatic drivers of *Sphagnum* species distributions

Charles Campbell[1,2*], Gustaf Granath[2] and Håkan Rydin[2]

[1] *Greensway AB, Ulls väg 24A, 756 51 Uppsala, Sweden;* [2] *Department of Ecology and Genetics, Evolutionary Biology Centre, Uppsala University, Norbyvägen 18D, SE-752 36 Uppsala, Sweden.*
*Correspondence: Charles Campbell, charlesecampbell@outlook.com

Abstract

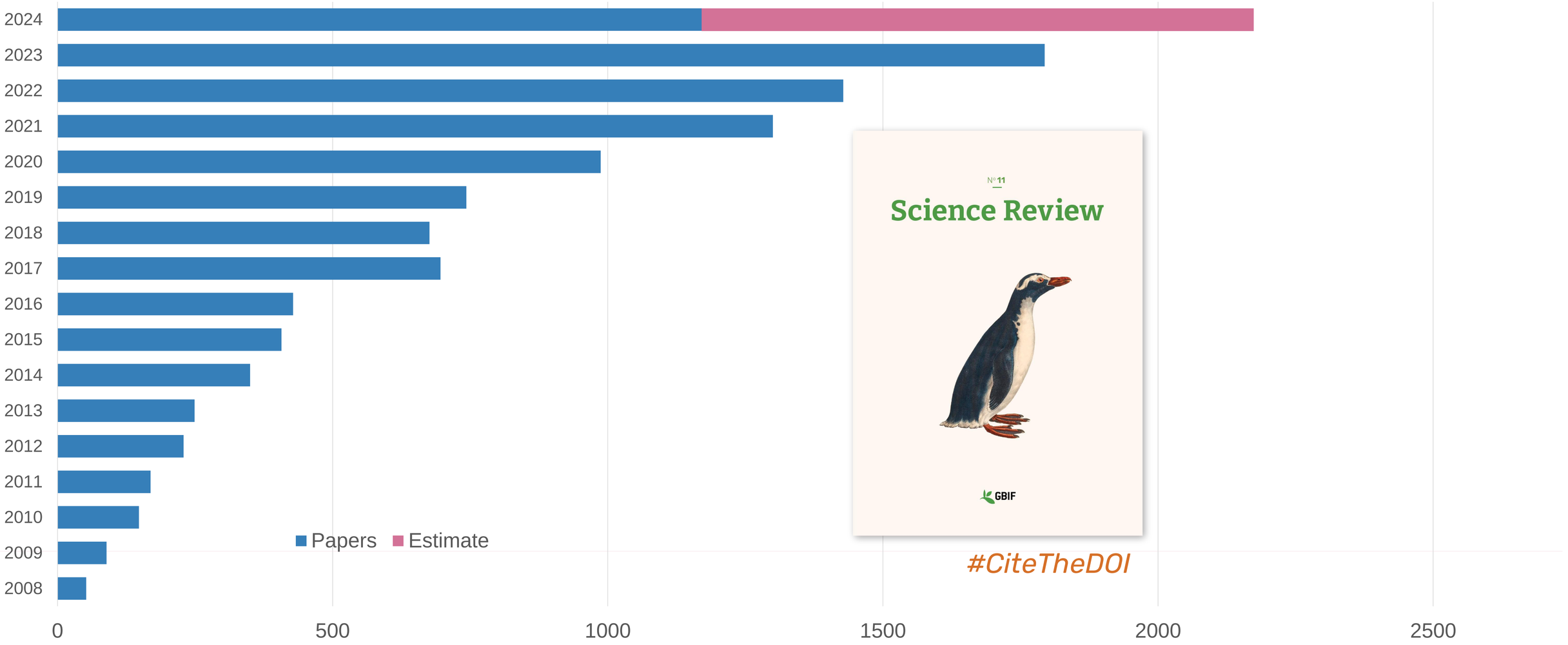
Peat mosses (genus *Sphagnum*) dominate most Northern mires and show distinct distributional limits in Europe despite having efficient dispersal and few dispersal barriers. This pattern indicates that *Sphagnum* species distributions are strongly linked to climate. *Sphagnum*-dominated mires have been the largest terrestrial carbon sinks in Europe over the last few millennia. Understanding the climatic drivers of *Sphagnum* species distributions is important for predicting the future functionality of peatlands. We used MaxEnt, with biologically relevant climatic variables, to model and clarify the current distributions of 45 *Sphagnum* species in Europe. We

Highlights

- Peat mosses (*Sphagnum*) form northern peatlands and species have different distributions across Europe.
- We model the climatic suitability for all European species using multiple databases and MaxEnt models.
- The climatic suitability for most species can be accurately modelled with mean annual temperature and water balance and their variation over the year.
- *Sphagnum* has its highest species richness in northwestern Europe.

Hofmann H, Kiebacher T, Moser T, Meier M (2021). Swiss National Bryophyte Databank. Swiss National Biodiversity Data and Information Centres – infospecies.ch. Occurrence dataset https://doi.org/10.15468/ajkhha accessed via GBIF.org on 2022-04-28.

Peer-reviewed publications using GBIF-mediated data



#CiteTheDOI

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Data citations

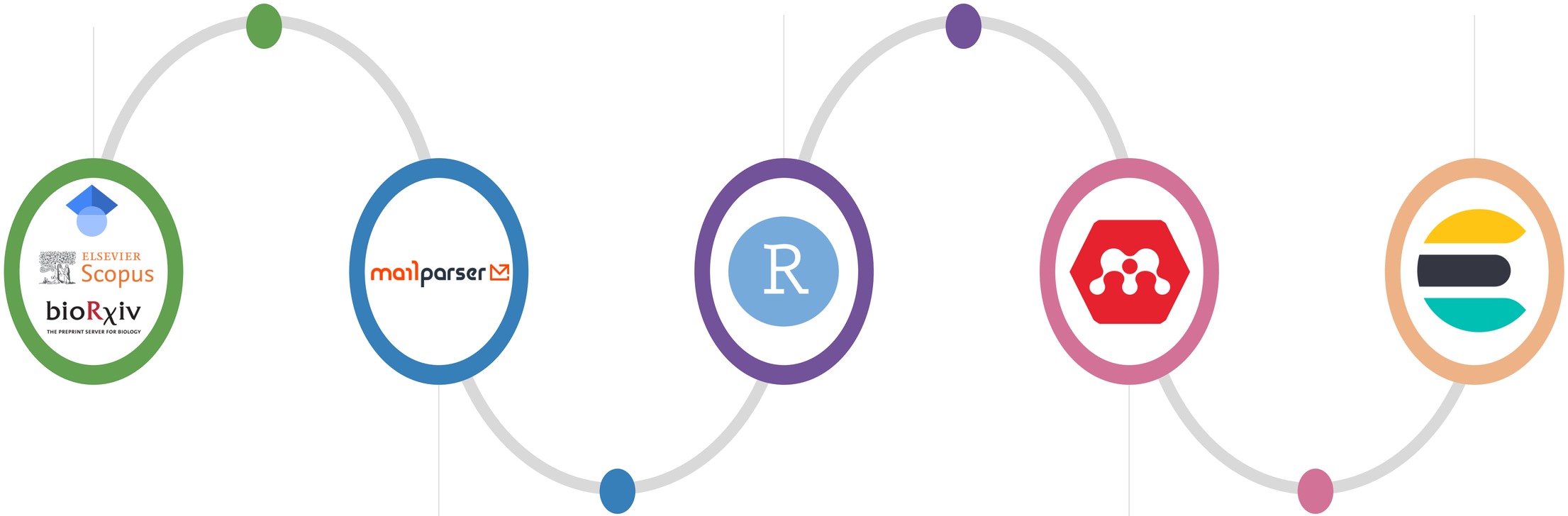
Ideal world

- All citations include a DOI, uniquely and specifically identifying the data used in a publication
- All data citations are included in the reference list of an article
- All data citations are machine-readable links between DOIs included in the DOI metadata, easily interpreted and used for quantifing citations
- 100% automatic 🤖

Real world

- Far from all citations include a DOI, and some tend to cite more data than is actually used
- Some citations are included in the body text of papers, some in data availability statements, and some are even hidden in supplements
- Even when done right, not all citations become available as machine-readable links between papers and dataset
- Automatic? 😰

Literature tracking in GBIF



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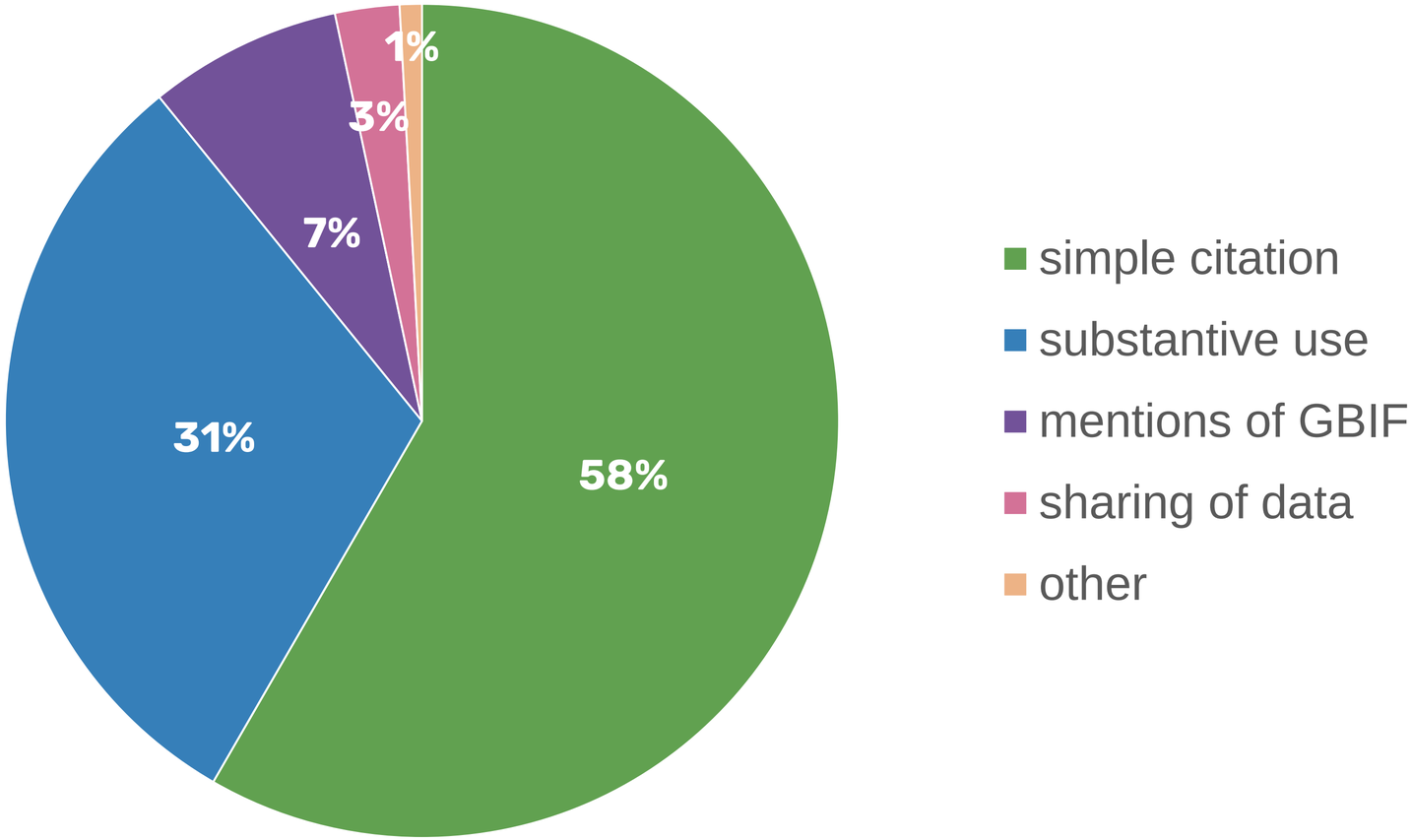
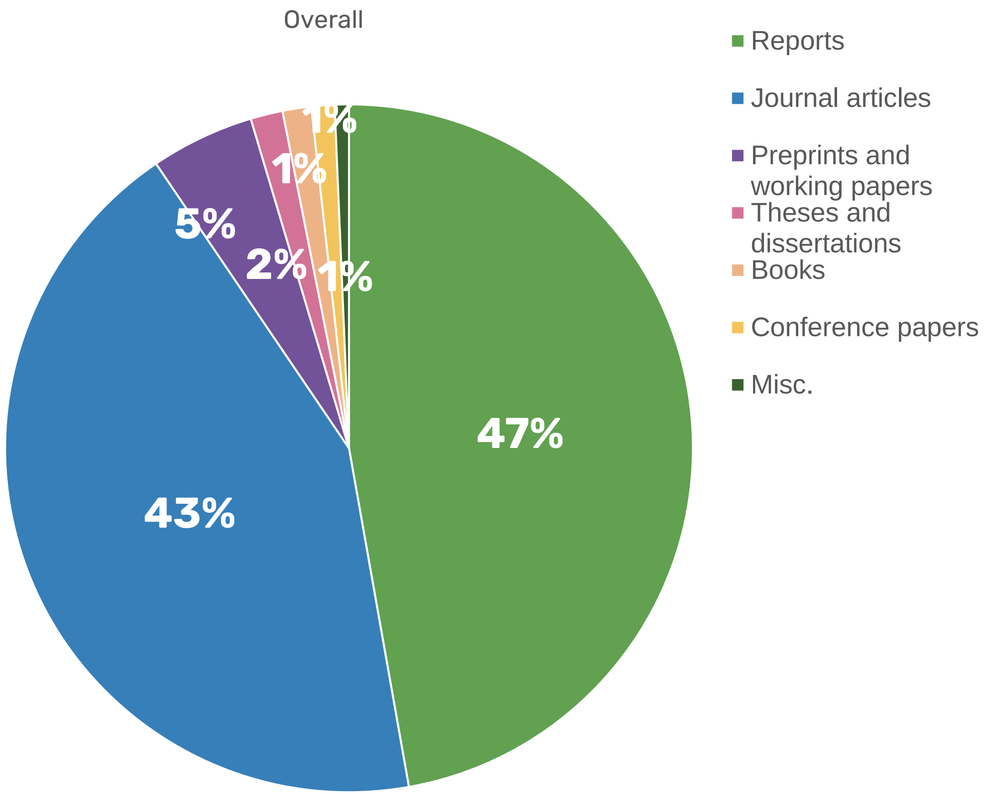


Types of literature tracked



- Reports
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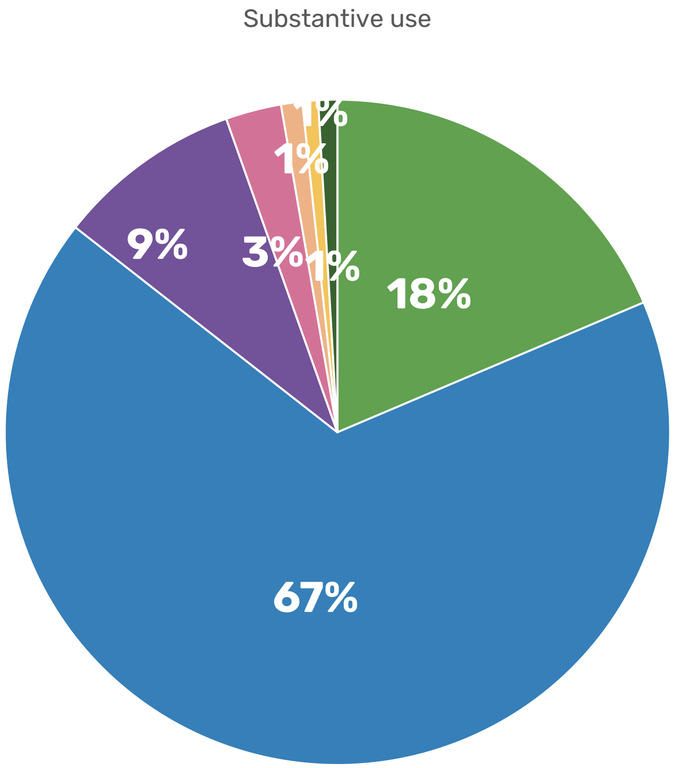
- Preprints and working papers
- Theses and dissertations
- Books
- Conference papers
- Misc.



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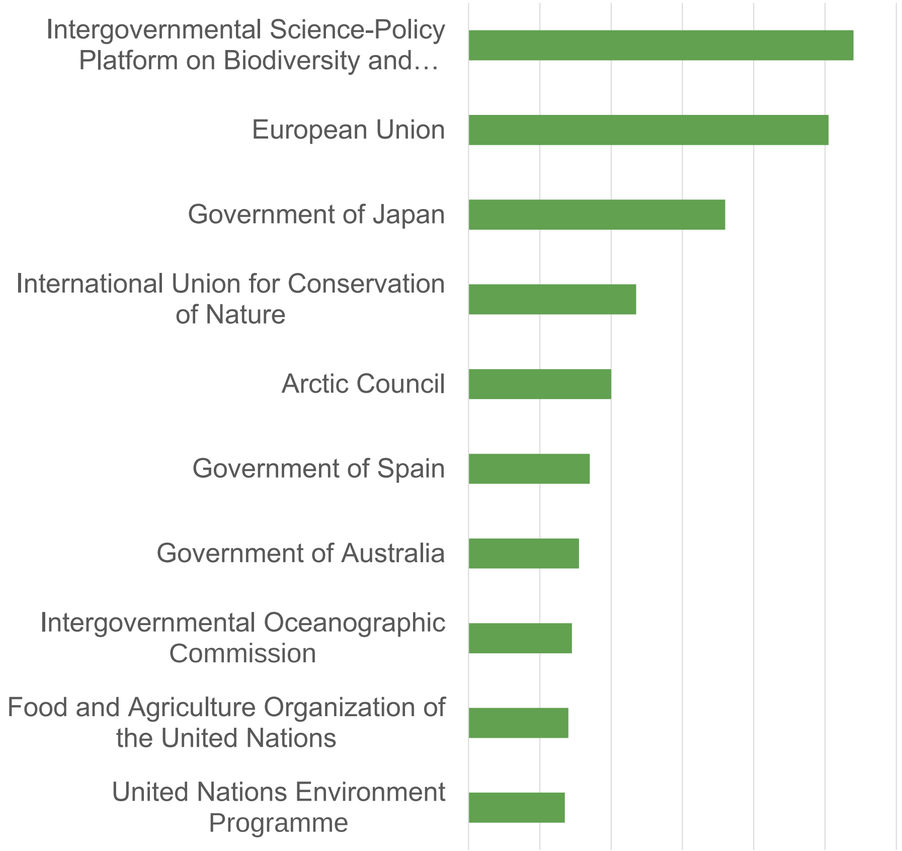

~10 years of tracking data use and citations

- Manuscript in progress
- Process of tracking literature
- Compiling all the findings from the programme including new deep dives into download and citation practices, taxonomic and geographic focus and more
- Stay tuned!

Dmitry Schigel
dschigel@gbif.org

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