NLBIF dag 2025

Niels Raes

20 Februari 2025

GBIF Global Biodiversity Information Facility

nlbif sharing biodiversity data

Programma I

9:30 – 10:00 **Inloop, ontvangst & koffie**

10:00 – 10:10 **Welkomstwoord** door Niels Raes, NLBIF node manager

10:10 – 11.00 **Wat zijn GBIF & NLBIF, update GBIF, NLBIF en opening NLBIF-call 2025**, door Niels Raes

11:00 – 11:30 **Pauze**, met koffie & thee

11:30 – 12:30 **Presentaties**

- **55 jaar steltlopers; ringen op het wad in de Waddenzee** (CALIDRIS), door Jim de Fouw en Wim Fokker
- **Kiezelwierenreeksen (1916-2022) uit verzuurde vennen** (Stichting Bargerveen), door Herman van Dam en Kevin Geurts
- **De Nationale Databank Flora en Fauna (NDFF) en open data** (BIJ12), door Dries Oomen

12:30 – 13:30 **Lunch**

Liparia splendens splendens
Photo by flamelily, CC0

Programma II

13:30 – 14:30 **Workshop: Wat kan NLBIF voor jou betekenen? Cursus aanbod, vereisten biodiversiteitsdata viewer, andere onderwerpen**, door Jeroen Creuwels en Niels Raes

14:30 – 15:00 **Pauze**, met koffie & thee

15:00 – 16.00 **Presentaties**

- **Van bevroren in de tijd naar beweging** (Missiemuseum Steyl), door Nina van der Werf
- **AI for Nature: research & applications** (Naturalis), door Laurens Hogeweg
- **Mobiliseren van data uit soundscapes** (Xeno-Canto), door Bob Planqué

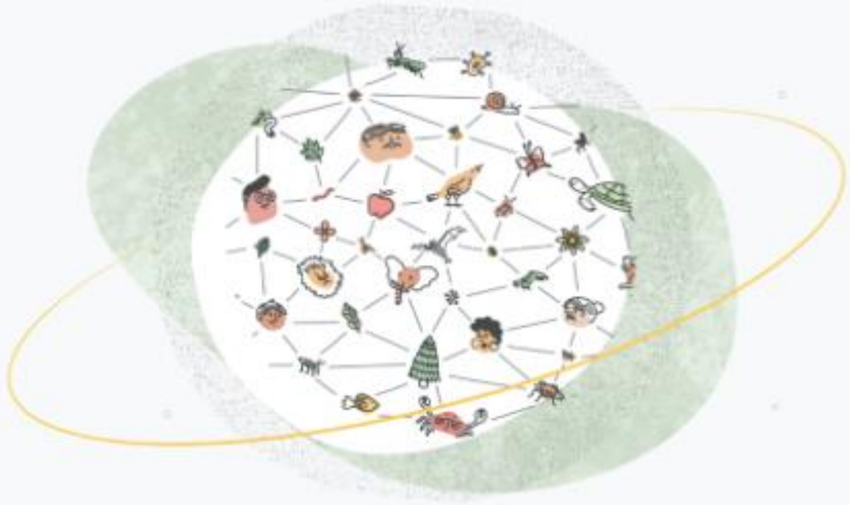
16:00 – 16.15 **Afsluitende woorden**

16:15 **Borrel**

Paractinia striata (Risso, 1826) ***observed in France by Sylvain Le Bris. cc-by-nc/4.0/***

Wat zijn GBIF en NLBIF?

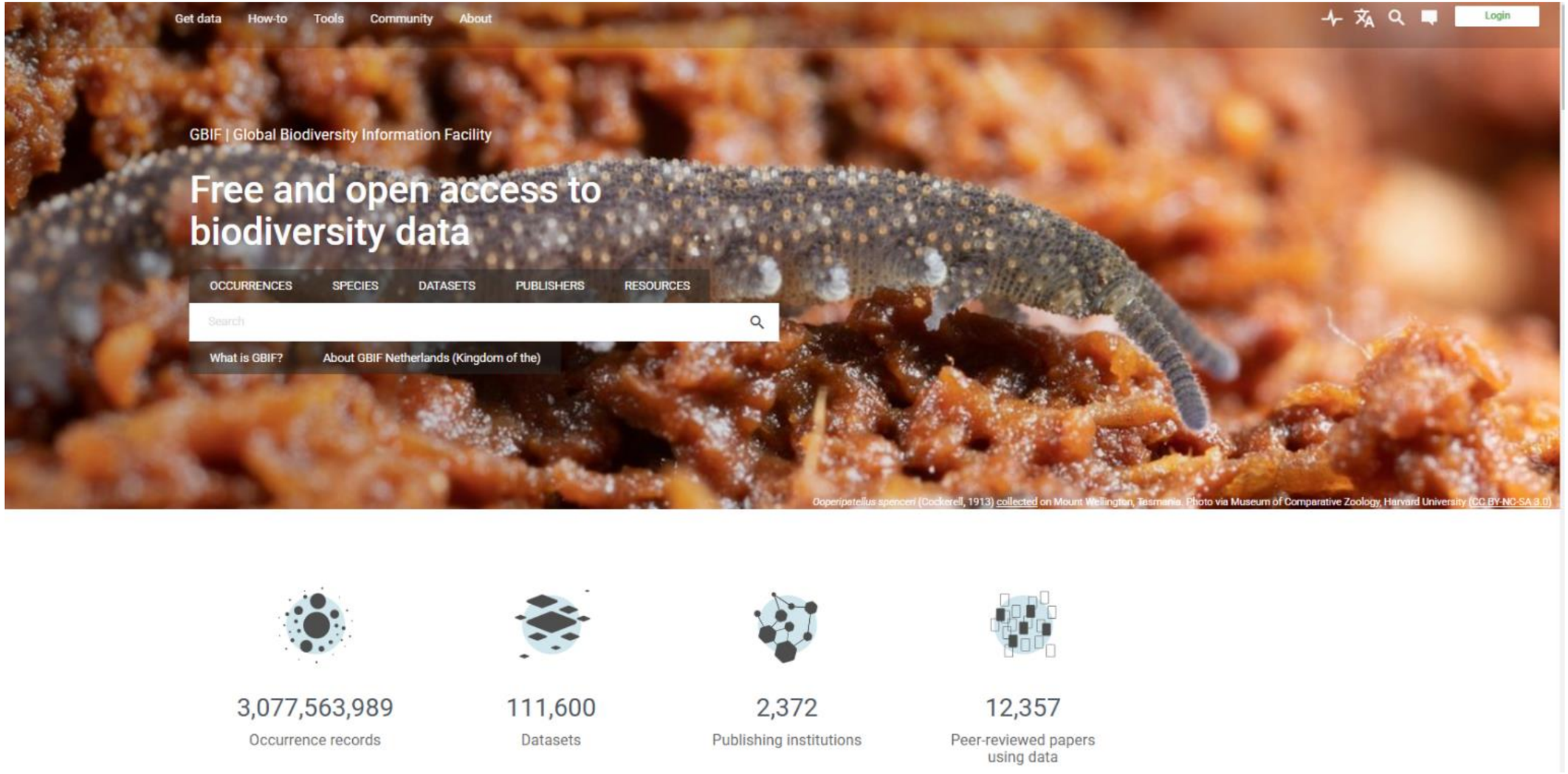
What is GBIF?



GBIF—the Global Biodiversity Information Facility—is an international network and data infrastructure funded by the world's governments and aimed at providing anyone, anywhere, open access to data about all types of life on Earth.

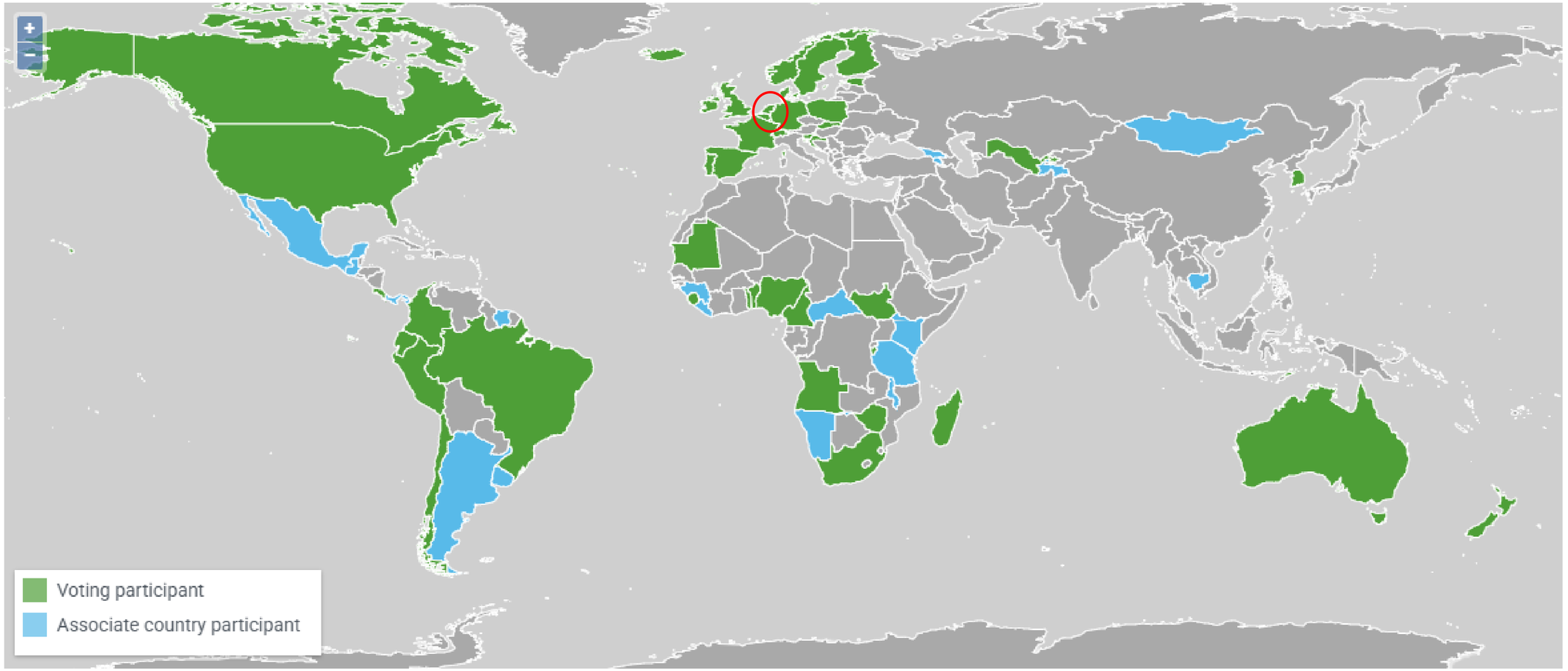
► Video Learn more

Wat zijn GBIF en NLBIF?



Wat zijn GBIF en NLBIF?

GLOBAL | AFRICA | ASIA | EUROPE AND CENTRAL ASIA | LATIN AMERICA AND THE CARIBBEAN | NORTH AMERICA | OCEANIA | PARTICIPANT ORGANIZATIONS | GBIF AFFILIATES



47 VOTING PARTICIPANTS | 18 ASSOCIATE COUNTRY PARTICIPANTS | 43 OTHER ASSOCIATE PARTICIPANTS | 2,430 PUBLISHERS

Wat zijn GBIF en NLBIF?

PARTICIPANT SUMMARY

Member status: Voting
GBIF participant since: 2001
GBIF region: Europe and Central Asia
Head of delegation: Martijn Poel

Node name: Netherlands Biodiversity Information Facility
Node established: 2002
Website: http://www.nlbif.nl/
Participant node manager: Niels Raes

CONTACTS

Netherlands Biodiversity Information Facility
P.O. Box 9517, 2300 RA Leiden, The Netherlands
(visiting address: Darwinweg 2, 2333 CR Leiden)
nlbif@naturalis.nl

Mr. Martijn Poel
Head of delegation
Ministry of Education, Culture and Science
P.O. Box 16375
2500 BJ The Hague
Netherlands (Kingdom of the)
m.a.poel@minocw.nl
+31631748578

Niels Raes
Additional delegate • Node manager
Naturalis Biodiversity Center
P.O. Box 9517
2300 RA Leiden
Netherlands (Kingdom of the)
niels.raes@naturalis.nl
+31 6 45782356

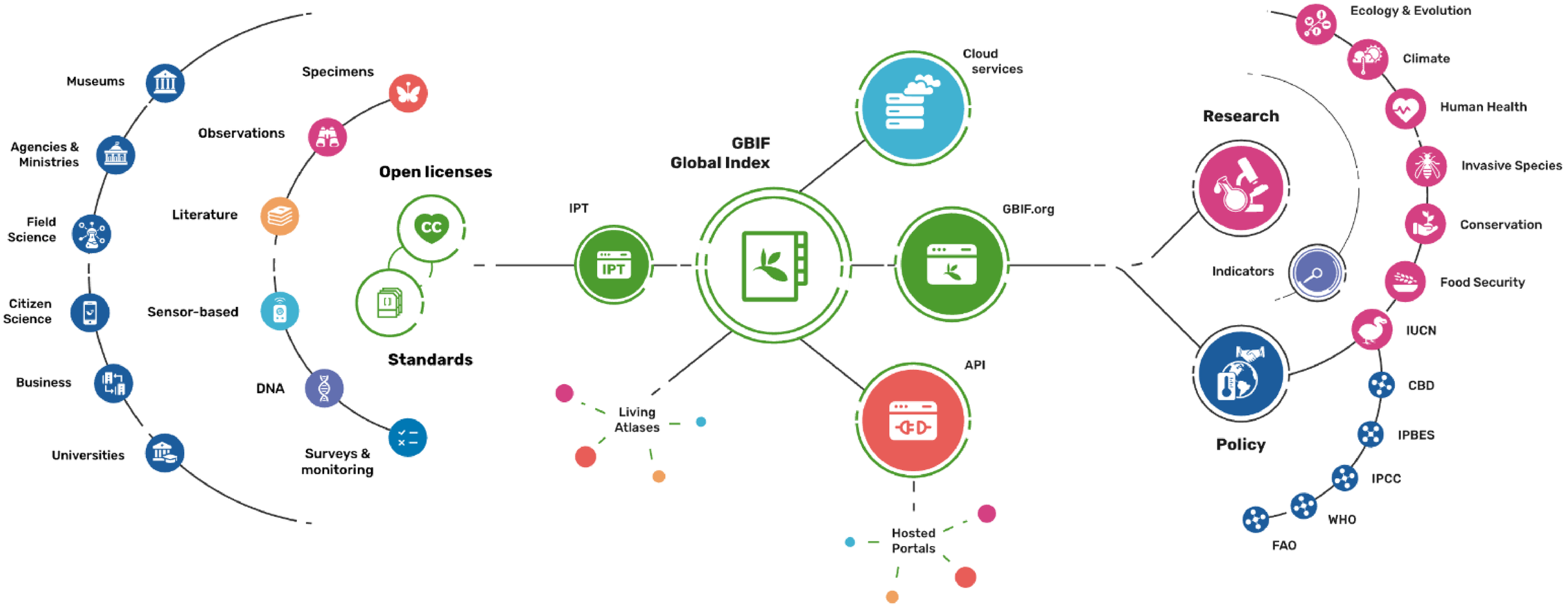
Mrs. Jennifa Dorleijn
Additional delegate
Ministry of Education, Culture and Science
P.O. Box 16375
2500 BJ The Hague
Netherlands (Kingdom of the)
j.dorleijn@minocw.nl
+31615038297

Jeroen Creuwels
Node staff
Naturalis Biodiversity Center
P.O. Box 9517
2300 RA Leiden
Netherlands (Kingdom of the)
jeroen.creuwels@naturalis.nl
+31 71 7519 362

Jade Eversmann
Node staff
Naturalis
Darwinweg 2
2333 CR, Leiden
Netherlands (Kingdom of the)
jade.eversmann@naturalis.nl

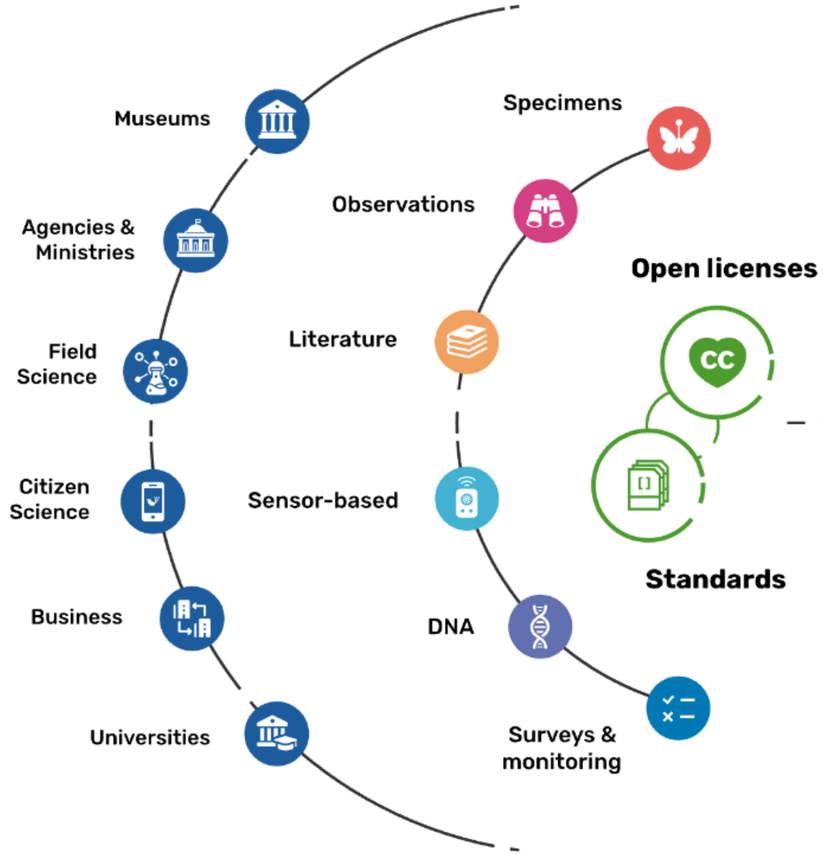
Eva Corssmit
Node staff
Naturalis Biodiversity Center
P.O. Box 9517
2300 RA Leiden
Netherlands (Kingdom of the)
eva.corssmit@naturalis.nl

Wat zijn GBIF en NLBIF?

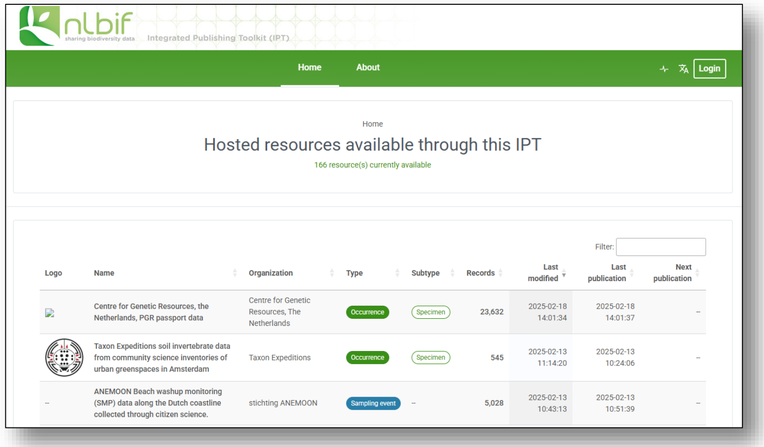


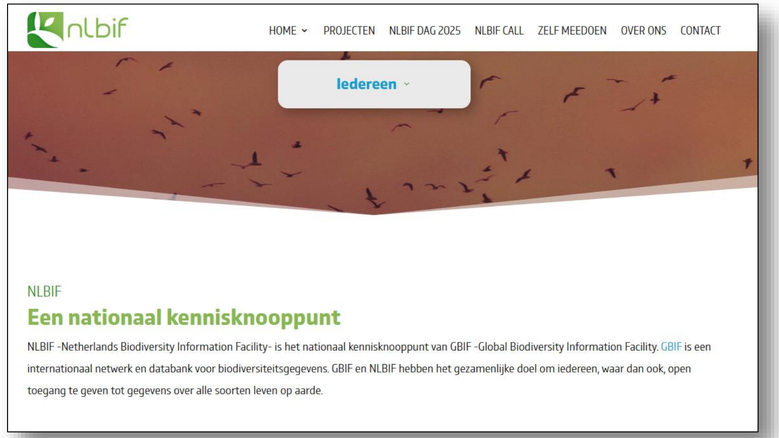
Wat zijn GBIF en NLBIF?

Create

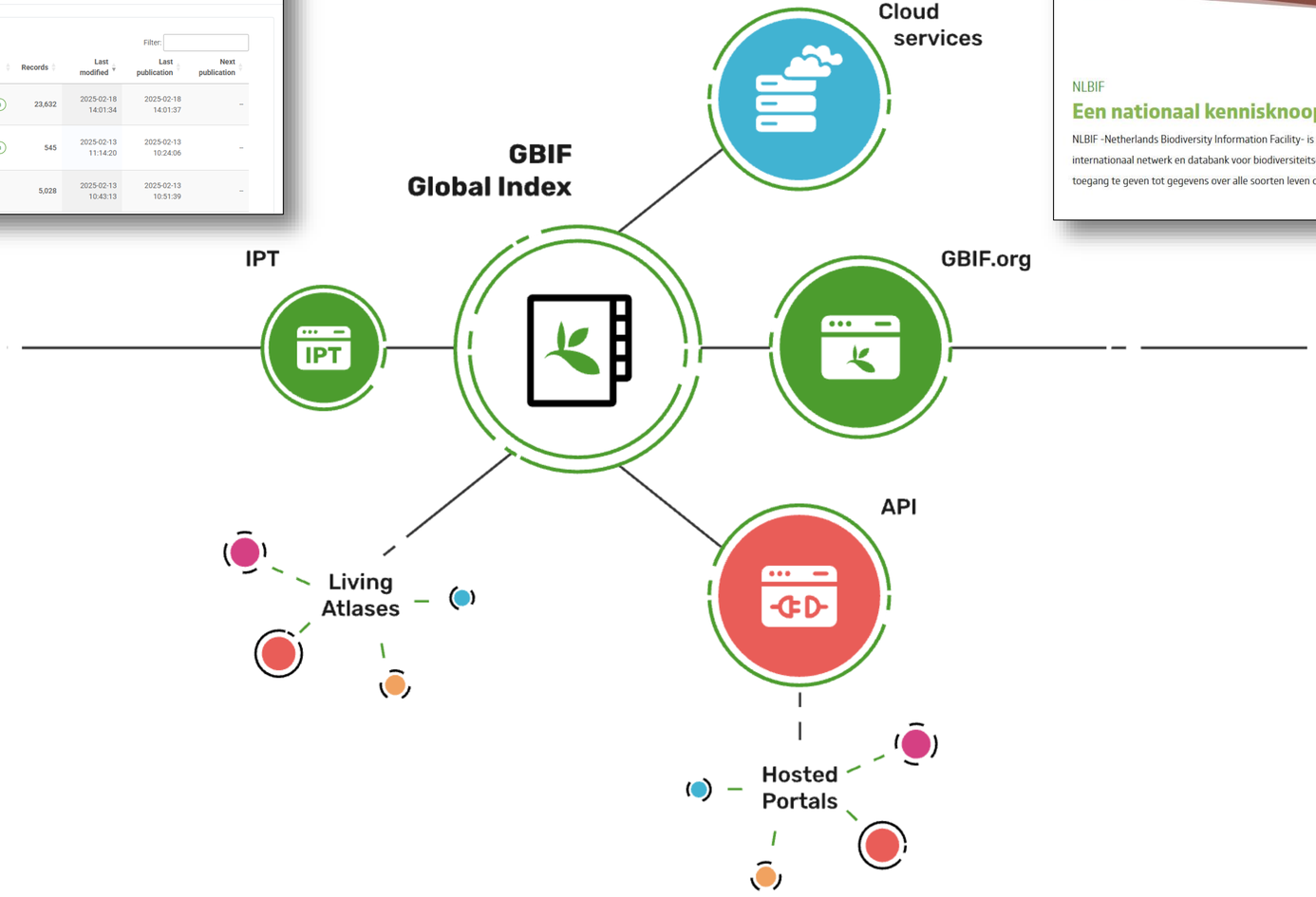


Wat zijn GBIF en NLBIF?





Share

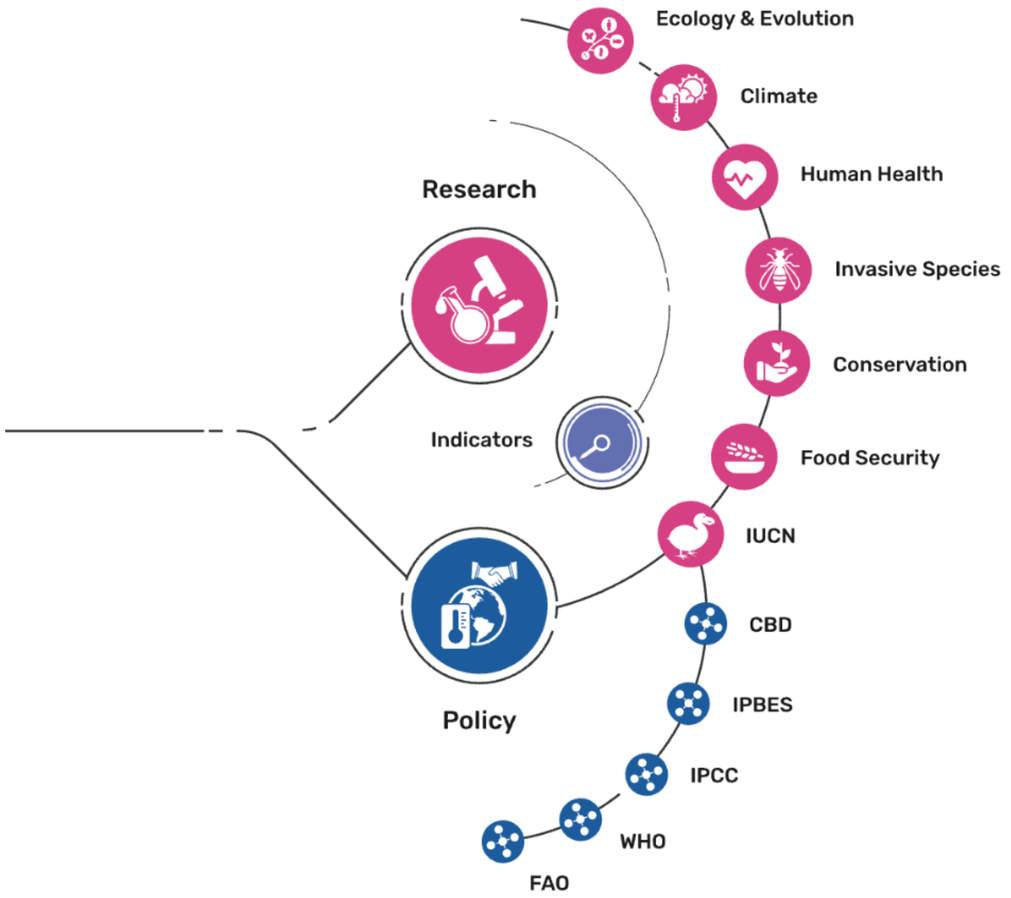


Wat zijn GBIF en NLBIF?

Wat zijn GBIF en NLBIF?

Transform

Apply and use data



Update GBIF

De GBIF Governing Board meeting 31 werd van 30 september tot 4 oktober georganiseerd in

Update GBIF

De GBIF Governing Board meeting 31 werd van 30 september tot 4 oktober georganiseerd in

Update GBIF

De GBIF Governing Board meeting 31:

- 38 delegaties waarvan 27 voting participants
- Stemmingen
  - Governing Board:
    - Governing Board Chair: Liam Lysaght (2nd term)
    - Governing Board 2nd Vice-chair: André Heughebaert (1st term)
  - Budget Committee:
    - Budget Committee Chair: Monika Huber (2nd term)
  - Science Committee:
    - Science Committee Chair: Birgit Gemeinholzer (2nd term)
    - Science Committee 2nd Vice-chair: no majority was reached in the intersessional election. A new call for this position will be issued at a later stage.
    - Science Committee 3rd Vice-chair: Soledad Ceccarelli (1st term)

Update GBIF

De GBIF Governing Board meeting 31:

- Tim Robertson vervangt Tim Hirsch als deputy director.

Update GBIF

De GBIF Governing Board meeting 31:

- Tim Robertson vervangt Tim Hirsch als deputy director.
- GBIF Awards
  - The 2024 Graduate Researchers Award winners:
    - Ross Stewart, South Africa
    - Paola Monguilod Brun, Spain
  - The winners of the 2024 Ebbe Nielsen Challenge:
    - **ChatIPT (first prize)**
    - Planetary Knowledge Base (second prize)
    - CoreTech Assistant (third prize)

Update GBIF

NEWS | 1 OCTOBER 2024

ChatIPT system wins the 2024 Ebbe Nielsen Challenge

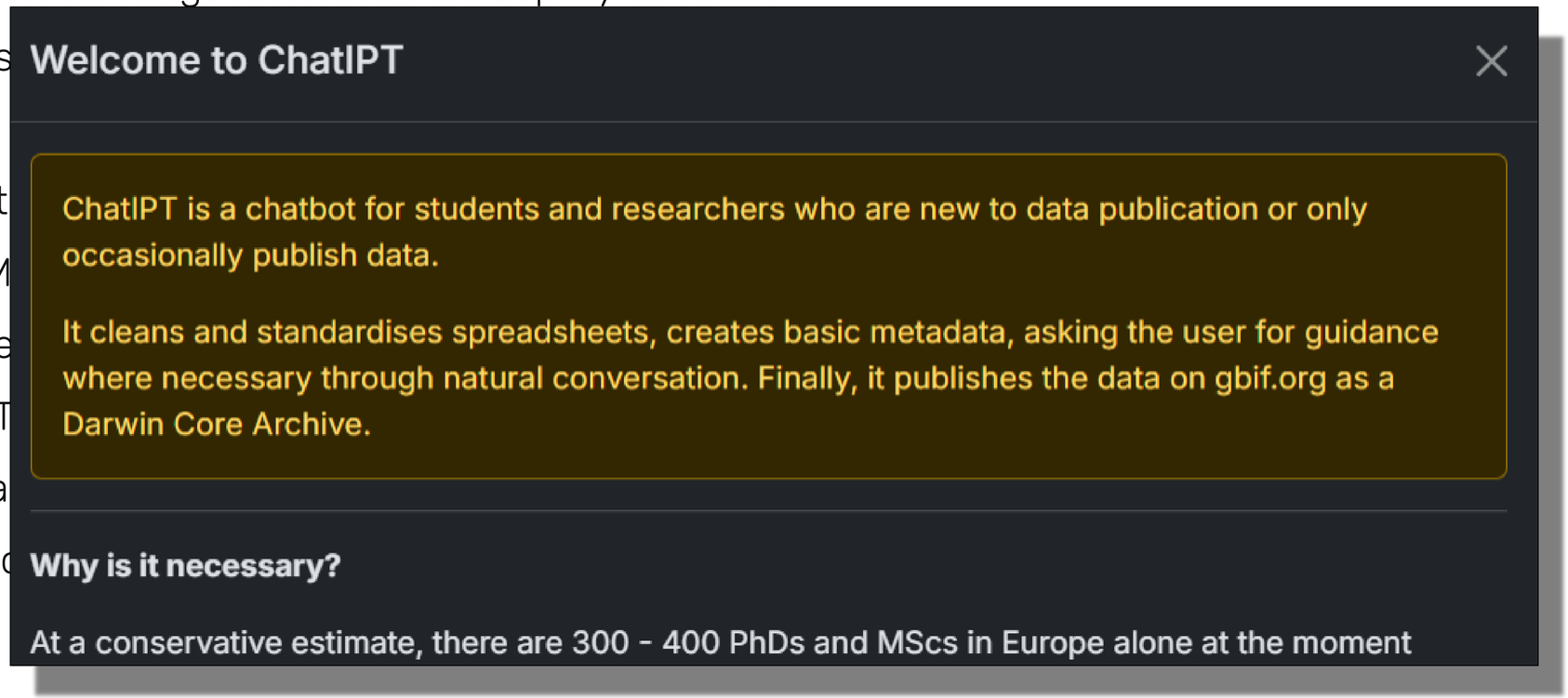
Assistant developed by Norwegian engineer Rukaya Johaadien helps transform spreadsheets into standardized GBIF-ready datasets; Planetary Knowledge Base and CoreTech Assistant place second and third in annual incentive prize

Rukaya Johaadien, head engineer from GBIF Norway and winner of the first prize entry in the 2024 Ebbe Nielsen Challenge. Photo courtesy of Ms Johaadien.

Update GBIF

De GBIF Governing Board meeting 31:

- Tim Robertson vervangt Tim Hirsch als deputy director.
- GBIF Awards
  - The 2024
    - Ross St
    - Paola M
  - The winne
    - ChatIPT
    - Planeta
    - CoreTec



http://68.183.64.100:3000/

Datasets

110,905

Hosted portals

25

Country Participants

65

Peer-review papers using data

12,184

Organizational Participants

43

Average records downloaded per month (2024)

202.8 billion

Publishers

2,354

Species occurrence records

3,038,370,536

By the numbers | 1 January 2025

www.gbif.org

Species occurrence records with multimedia evidence

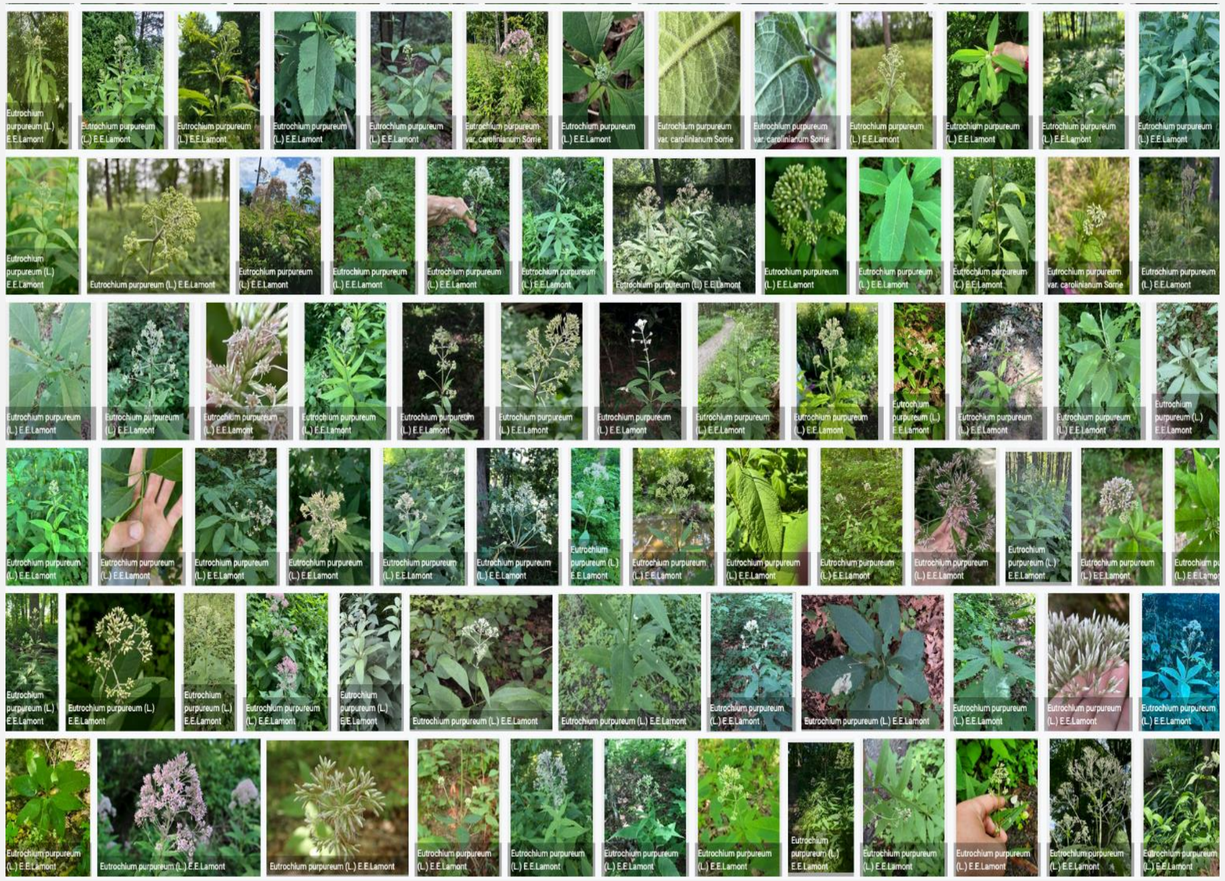
213.5 million records with

taxonomically identified images

- 139.4 million human observations
- 64.4 million specimens
- 7.1 million material samples
- 1.4 million fossil specimens

1,550,131 audio files

11,368 videos

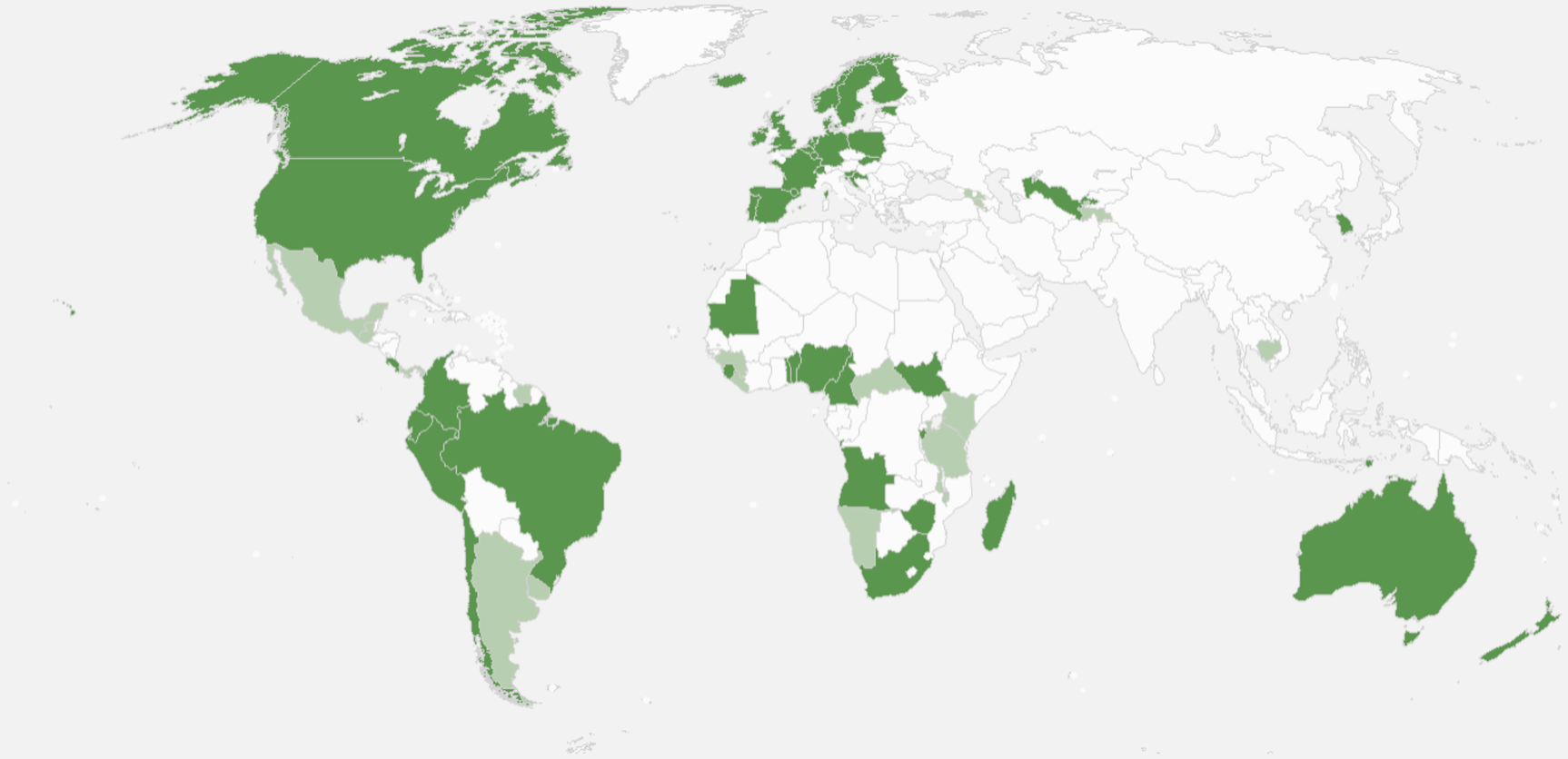


https://www.gbif.org/occurrence/gallery

GBIF Participant countries

47 Voting Participants

18 Associate Participants

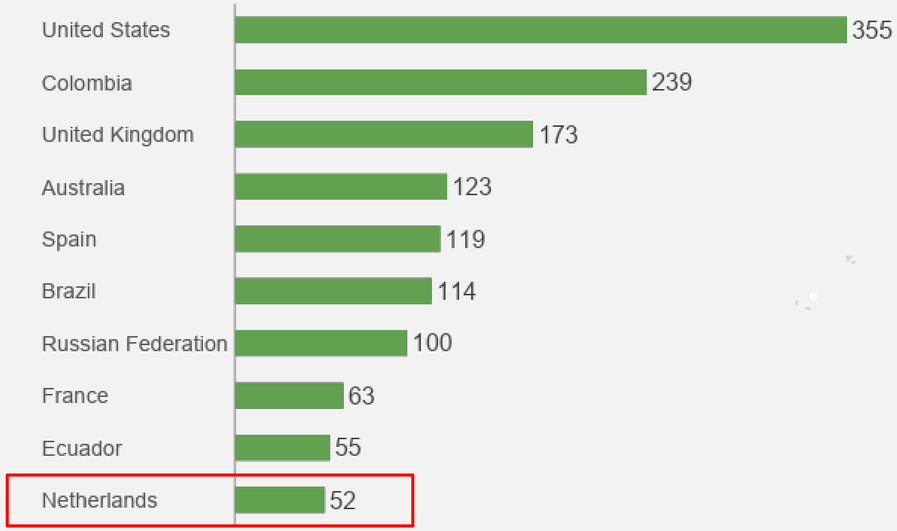


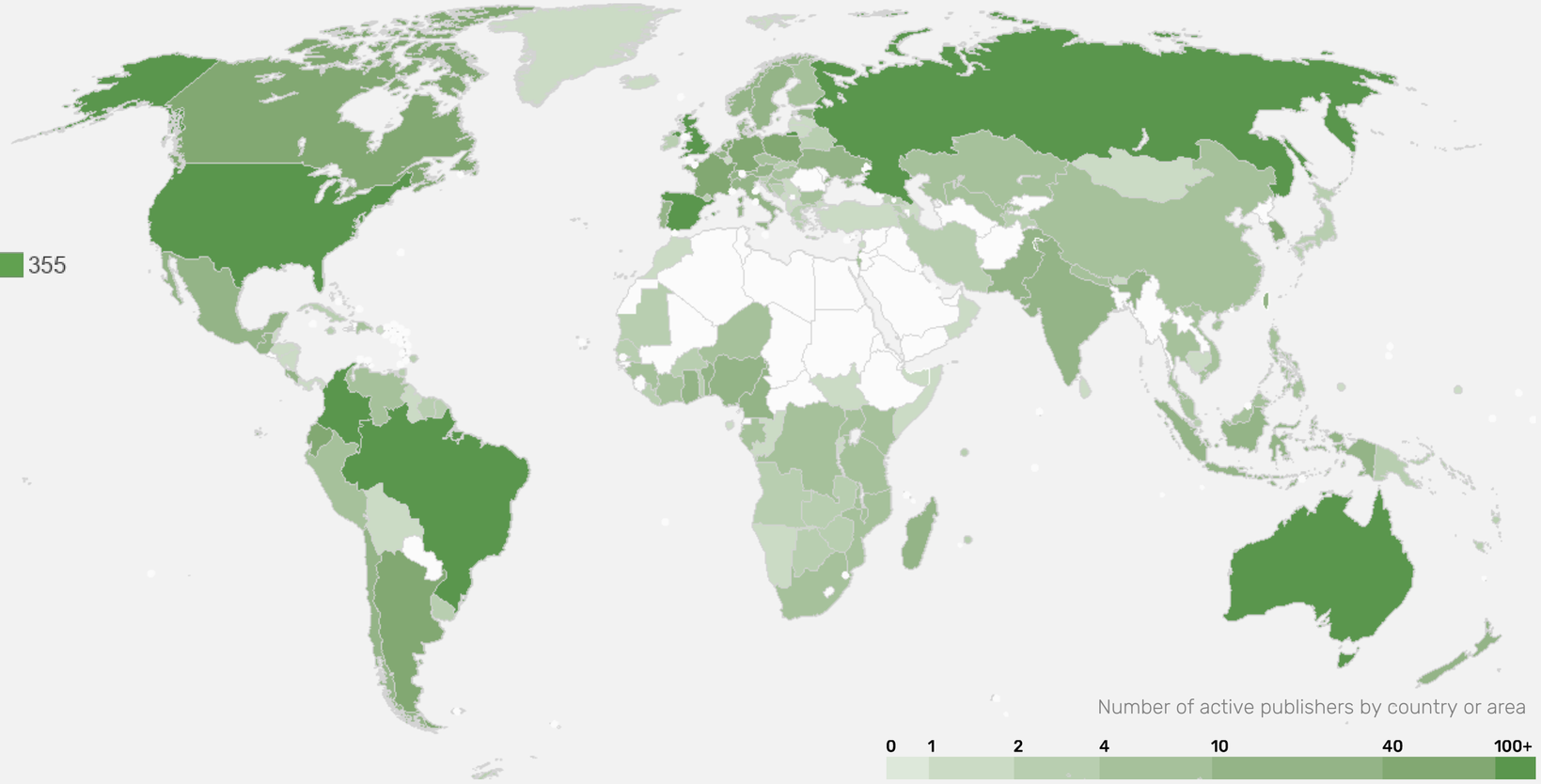
https://www.gbif.org/the-gbif-network

1 January 2025

GBIF network of data publishing institutions

144 countries/areas with institutions sharing data through GBIF

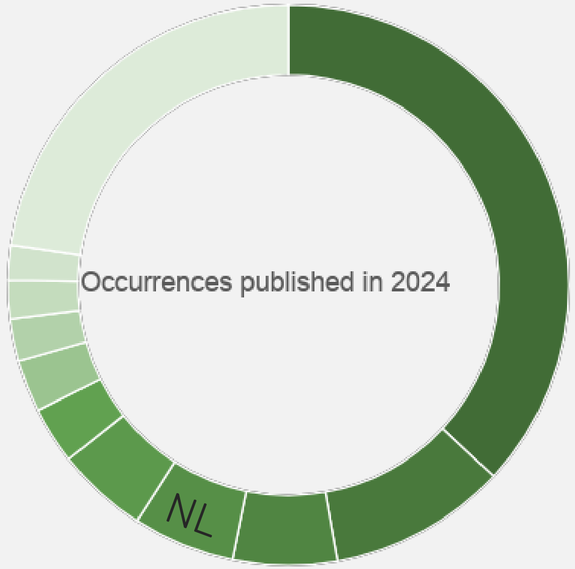




https://www.gbif.org/publisher/search

Occurrences published by country: 2024

Rank	Country/Territory	2024	2023 total	2023 rank
1	United States	158,323,610	151,004,708	1
2	France	43,910,491	13,208,845	5
3	Sweden	25,696,307	9,339,841	7
4	Netherlands	25,251,786	14,293,849	4
5	Canada	22,530,128	22,744,659	3
6	Australia	14,003,238	12,714,959	6
7	United Kingdom	12,938,043	36,220,446	2
8	India	10,369,964	8,542,437	9
9	Spain	9,429,667	7,633,366	8
10	Poland	8,675,622	2,600,757	22
	OTHER COUNTRIES + AREAS	**97,322,395**	81,266,325	
	TOTAL	**428,451,251**	355,993,458	



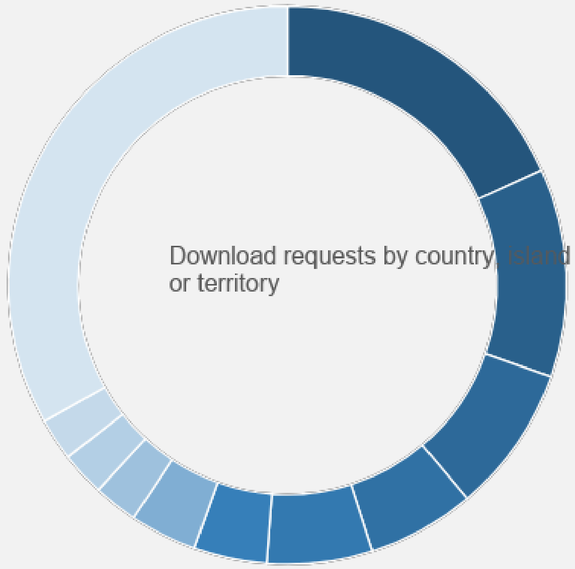
https://www.gbif.org/occurrence/search

Data download requests by country: 2024

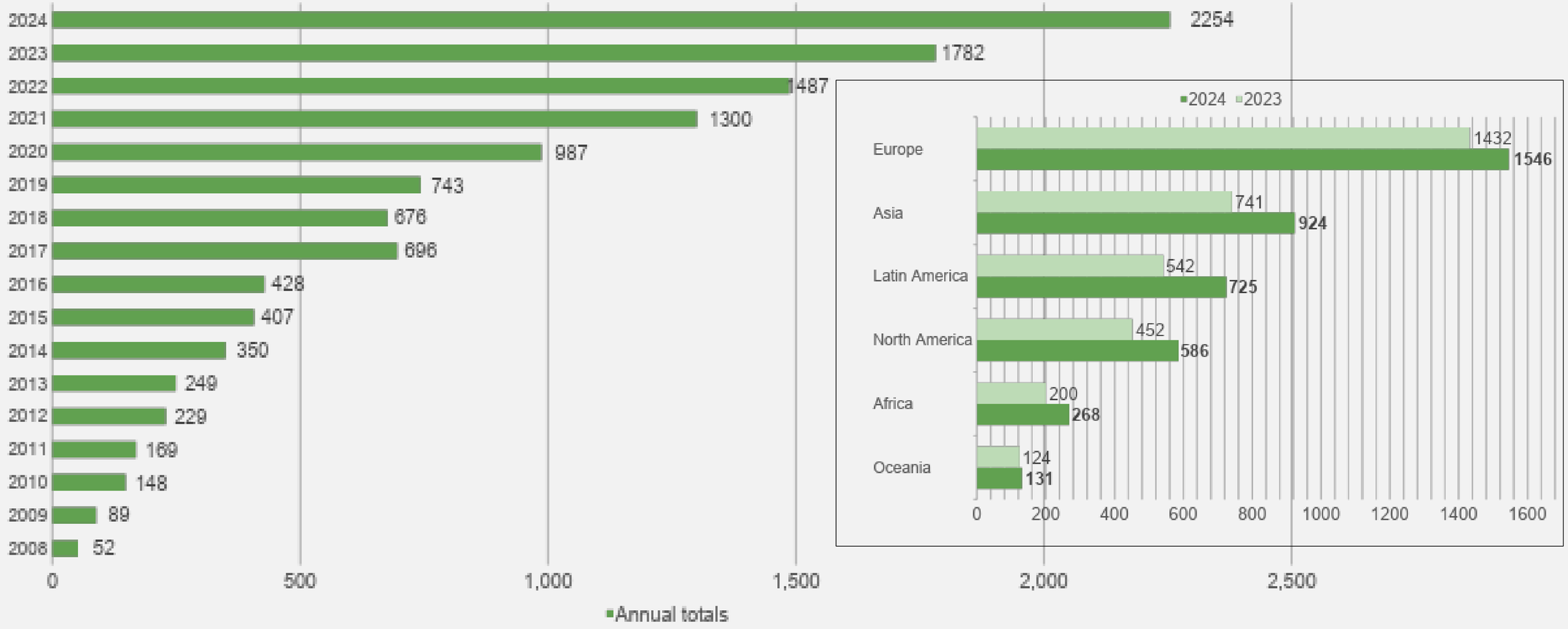
Rank	Country	2024	2023 total	2023 rank
1	China	63,485	39,253	1
2	United States	41,921	34,275	2
3	Mexico	29,712	26,051	3
4	Colombia	21,641	19,341	4
5	Brazil	21,274	18,370	5
6	Spain	14,704	13,492	6
7	United Kingdom	13,502	10,044	7
8	Canada Germany	8,946	6,649	9
9	France Canada	8,872	7,248	8
10	Germany France	8,558	5,788	10
	OTHER COUNTRIES + AREAS	**115,002**	87,262	
	TOTAL	**347,717**	267,773	

157

countries, islands & territories where users have ≥10 requested downloads



Peer-reviewed publications using GBIF-mediated data



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

Global Registry of Scientific Collections

Suggestions reviewed
2,003

Institutions
8,639

Countries
120

Collections
8,342

Country editors
60

Digitized specimens
233,125,538

GRSciColl by the numbers | 1 January 2025

scientific-collections.gbif.org

GRSciColl
Institutions
Collections
Specimens
About
How-to
Global Registry of Scientific Collections
A worldwide catalogue of scientific collections
Institution name
Digitized specimens
Search institutions
Getting started?
Institutions in Netherlands (Kingdom of the)
Calcinus tubularis (Linnaeus, 1767). The crustaceans collection (IU) of the Muséum national d'Histoire naturelle (MNHN - Paris) Photo 2019. Licensed under CC BY 4.0

Hosted portals

4
Institutional

12
GBIF Participant and
GBIF Regional

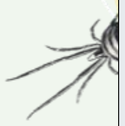
25
Hosted portals in
production

27
In development

7
Networks/thematic
networks

https://www.gbif.org/hosted-portals

Hosted portals



Featured hosted portals in production

European Journal of Taxonomy

Portal datos de biodiversidad de Argentina

Biodiversidad.co

GBIF.us

SIB Uruguay

Pacific Biodiversity Information Facility

DiSSCo UK

Gebaseerd op GRSciColl

Biodiversidata

https://www.gbif.org/hosted-portals

Update NLBIF

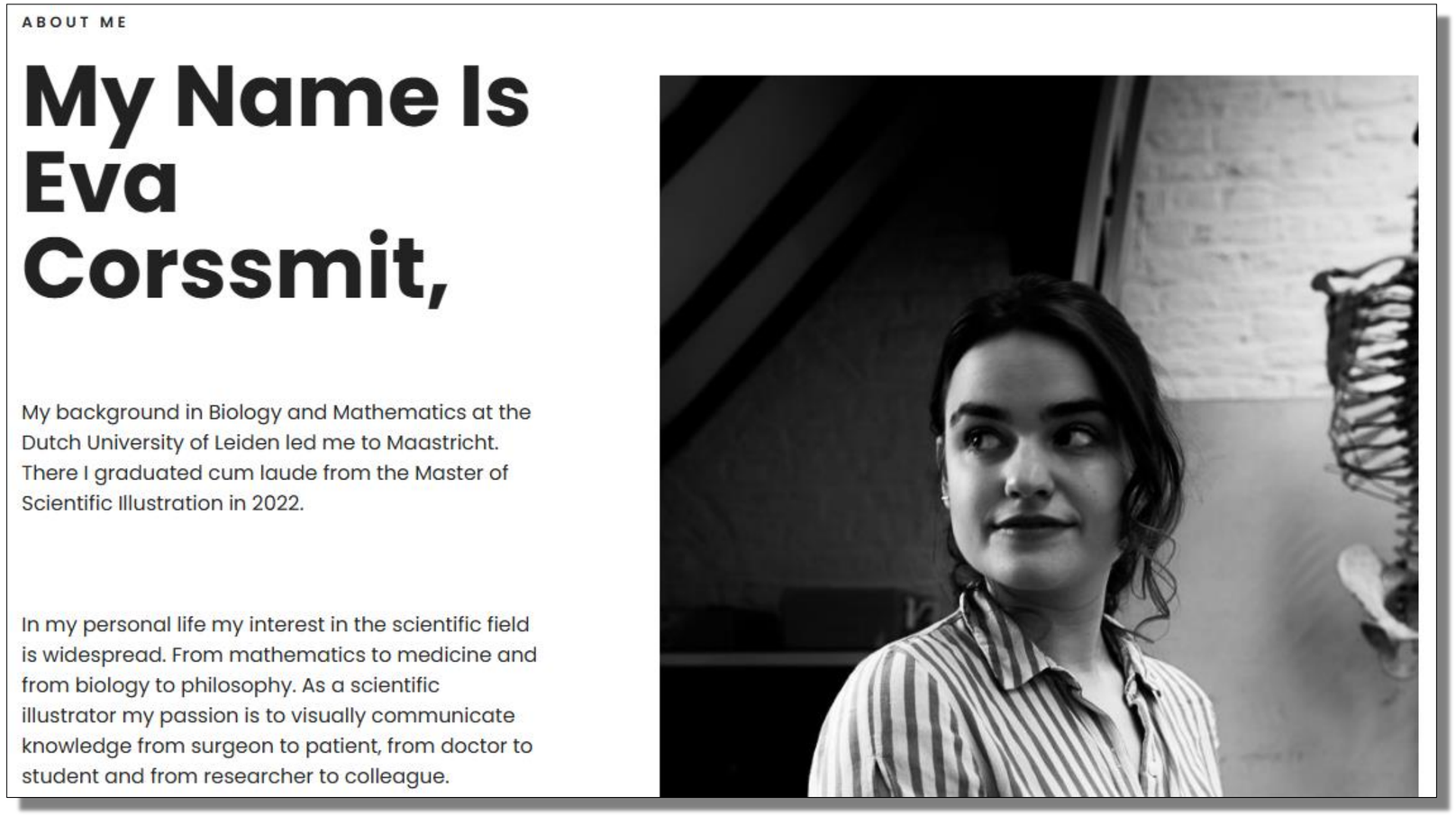
NLBIF heeft **twee nieuwe medewerksters**

Jade Eversmann vervangt Amy van Nobelen als communicatie medewerkster.

Update NLBIF

NLBIF heeft **twee nieuwe medewerksters**

Eva Corssmit is per 1 februari 2025 begonnen als ‘Node staff’ medewerkster.



https://evacorssmit.com/

Update NLBIF

Data availability in Netherlands

Animalia	**86,265,388** occurrences	*Plantae*	**29,825,069** occurrences	*Fungi*	**2,637,041** occurrences	*Unknown*	**95,639** occurrences		
Protozoa	**105,798** occurrences	*Bacteria*	**124,462** occurrences	*Virus*	**12,074** occurrences	*Chromista*	**690,007** occurrences	*Archaea*	**1,031** occurrences

Data mobilization

Institutions from

Netherlands

published

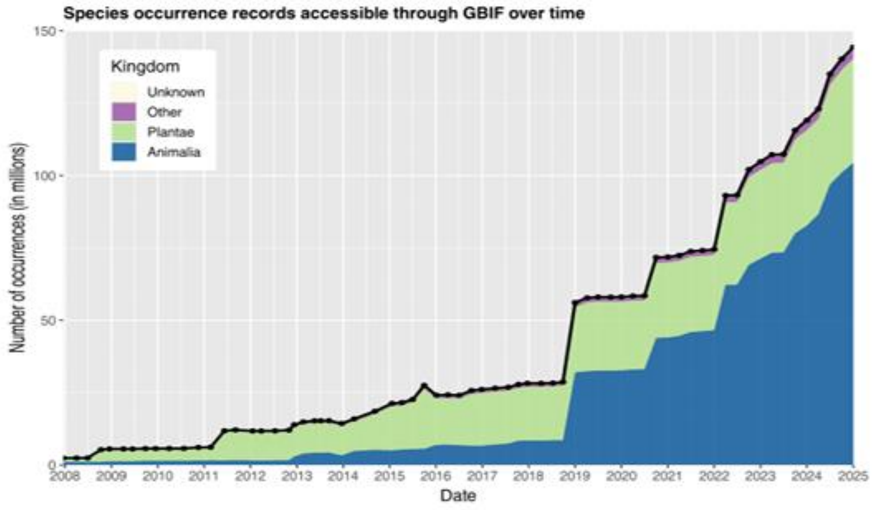
25,251,786

new occurrence records during 2024

out of a total of

428,451,251

occurrence records added globally to GBIF.org



Number of records published by institutions in Netherlands, categorized by kingdom

1,17 miljoen records per dag

Update NLBIF

Newest publishers from Netherlands

Strandwerkgemeenschap

Vangstenregistratie.nl

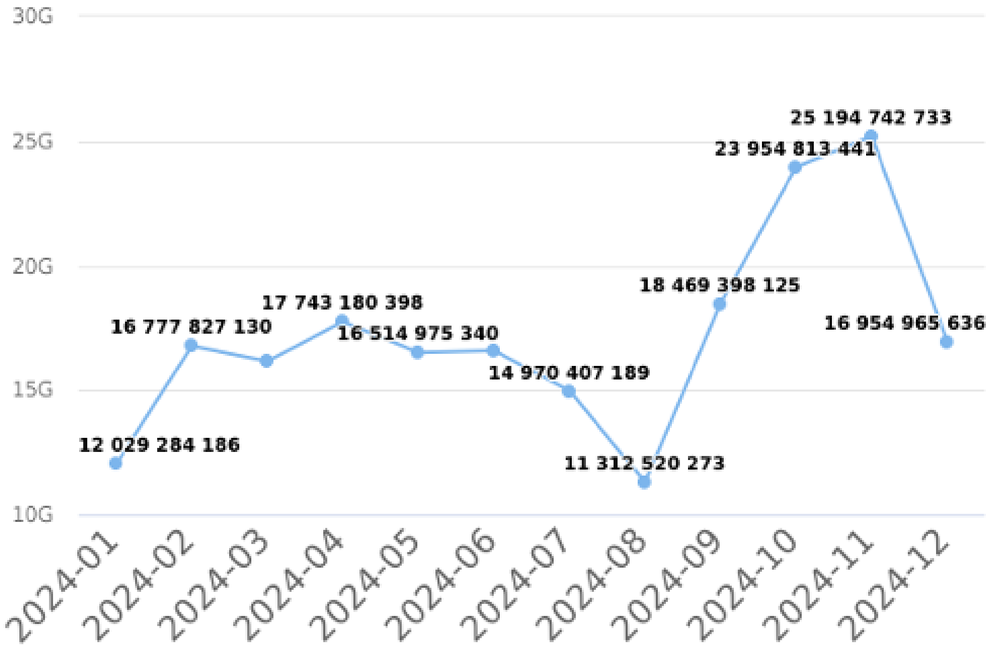
Stichting Bargerveen

Stadhuismuseum Zierikzee

Stichting Calidris

See all publishers from this country or area
gbif.org/publisher/search?country=NL

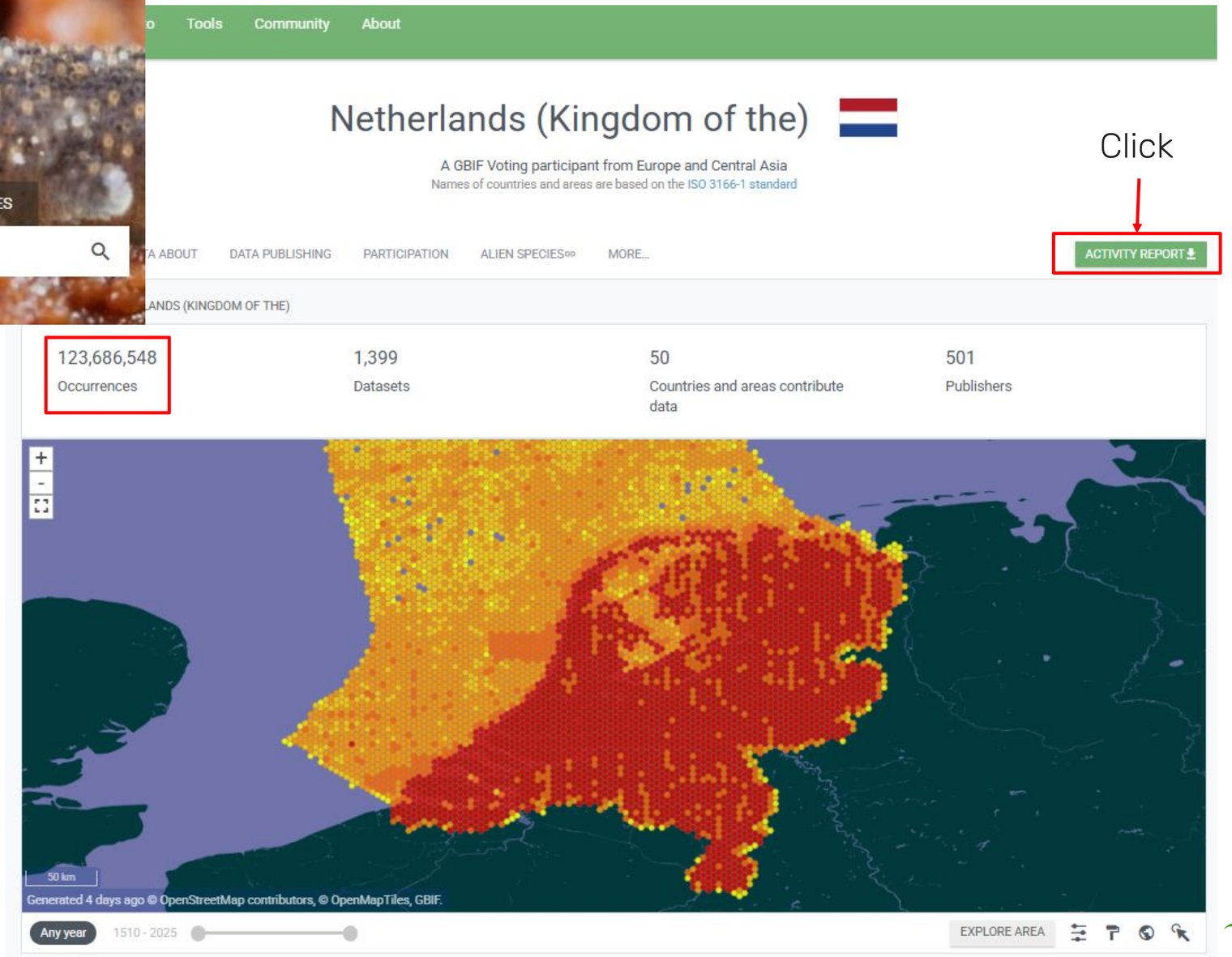
Occurrence records downloaded from GBIF.org, published by institutions in Netherlands



Number of occurrence records downloaded via GBIF.org published by institutions in Netherlands

Update NLBIF

Click

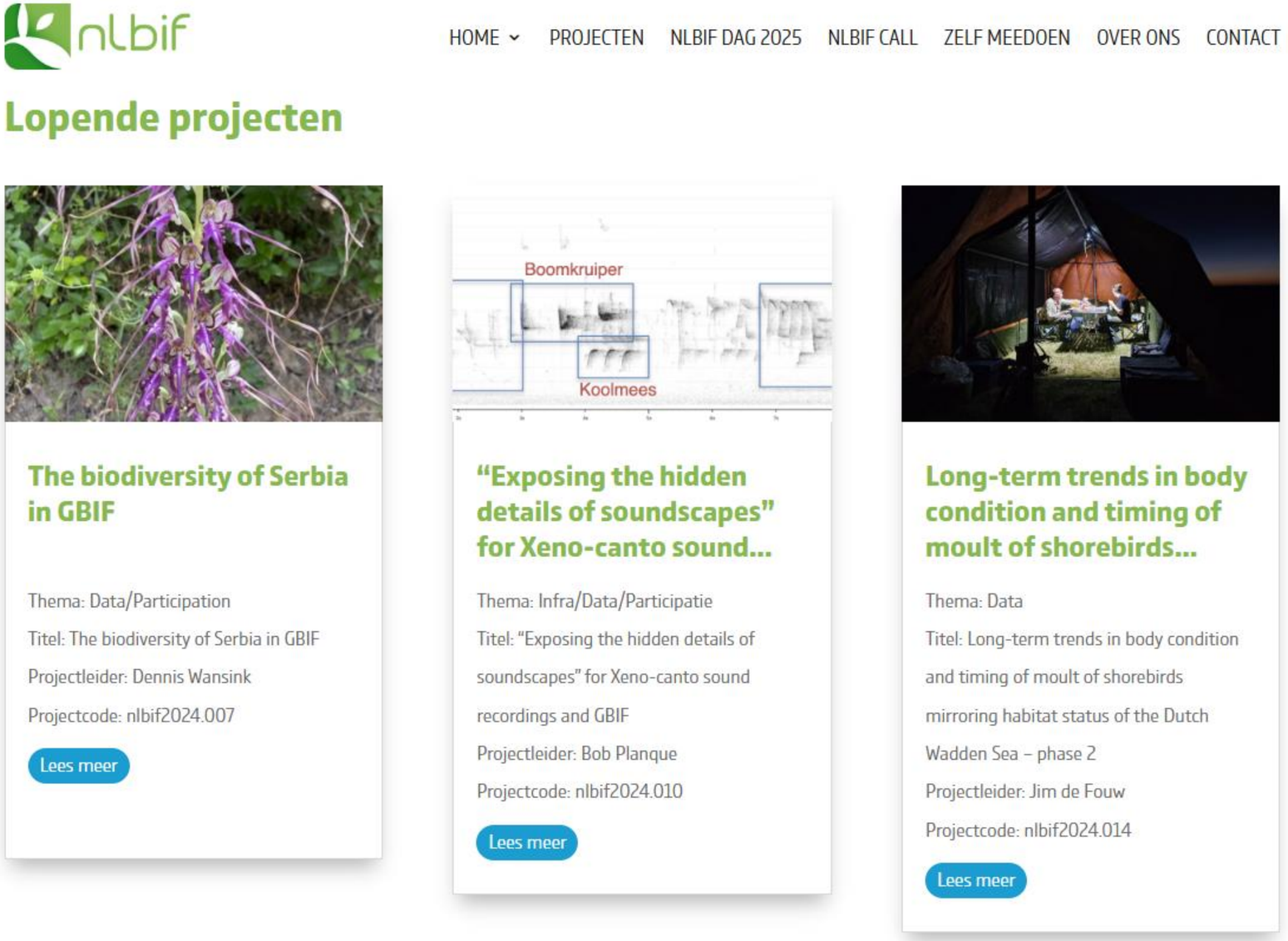


Update NLBIF

NLBIF-call 2024

10 nieuwe projecten

1. **Xeno-Canto**
2. The Habitat Foundation
3. **CALIDRIS**
4. Paddenstoelenonderzoek Nederland
5. Natuurmuseum Brabant
6. **Stichting Bargerveen**
7. Nederlandse Vereniging voor Libellenstudie (NVL)
8. **Missiemuseum Steyl**
9. NIOO-KNAW
10. NIOZ



https://www.nlbif.nl/projecten/

Update NLBIF

Naturalis en accountants slaan de handen ineen om biodiversiteit te becijferen

Duurzaamheidsrichtlijn Nieuwe Europese regels verplichten bedrijven tot uitvoerige rapportage over hun prestaties op duurzaamheidsgebied. Voor de aanpak hiervan ging accountant en adviseur KPMG in de leer bij Naturalis in Leiden.

Cato Brinkhof 29 juni 2023 om 22:43
Leestijd 4 minuten

https://www.nrc.nl/nieuws/2023/06/29/bedrijven-moeten-hun-biodiversiteit-meten-maar-hoe-naturalis-ging-aan-de-slag-met-de-accountants-van-kpmg-a4168600

Update NLBIF

Finance

Home | Regulation, Supervision | Financial markets | Banking & insurance | Sustainable finance | Digital finance | Consumer finance | Financial crime | EU & worldwide

Home > Financial markets > Company reporting and auditing > Company reporting > Corporate sustainability reporting

Corporate sustainability reporting

EU rules require large companies and listed companies to publish regular reports on the social and environmental risks they face, and on how their activities impact people and the environment.

PAGE CONTENTS

What the EU is doing and why

Policy making timeline

Relevant legislation

Related links

What the EU is doing and why

EU law requires all large companies and all listed companies (except listed micro-enterprises) to disclose information on what they see as the risks and opportunities arising from social and environmental issues, and on the impact of their activities on people and the environment.

This helps investors, civil society organisations, consumers and other stakeholders to evaluate the sustainability performance of companies, as part of the European green deal.

New rules on corporate sustainability reporting: The Corporate Sustainability Reporting Directive

On 5 January 2023, the Corporate Sustainability Reporting Directive (CSRD) entered into force. It modernises and strengthens the rules concerning the social and environmental information that companies have to report. A broader set of large companies, as well as listed SMEs, will now be required to report on sustainability. Some non-EU companies will also have to report if they generate over EUR 150 million on the EU market.

16.12.2022 EN Official Journal of the European Union L 322/15

DIRECTIVES

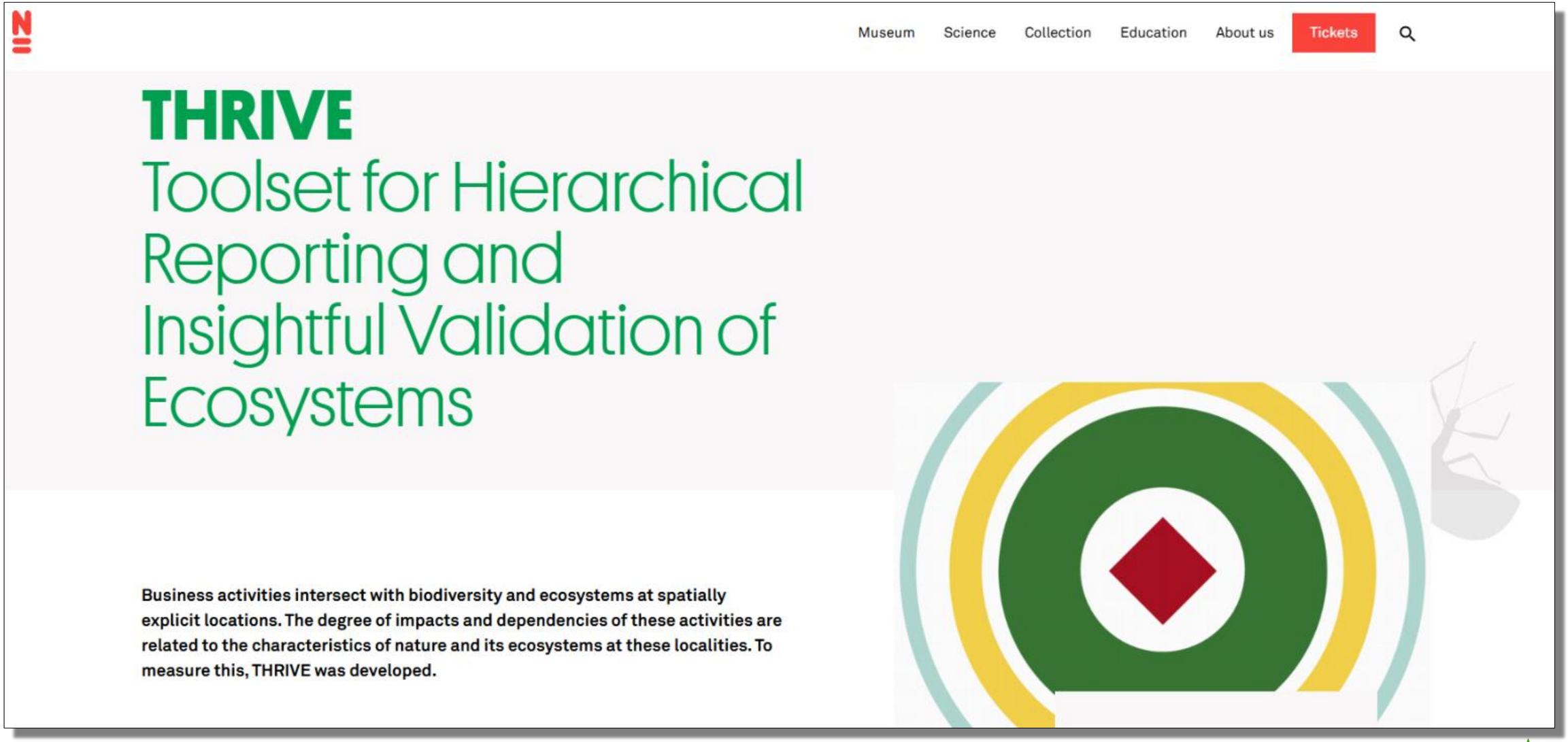
DIRECTIVE (EU) 2022/2464 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 14 December 2022

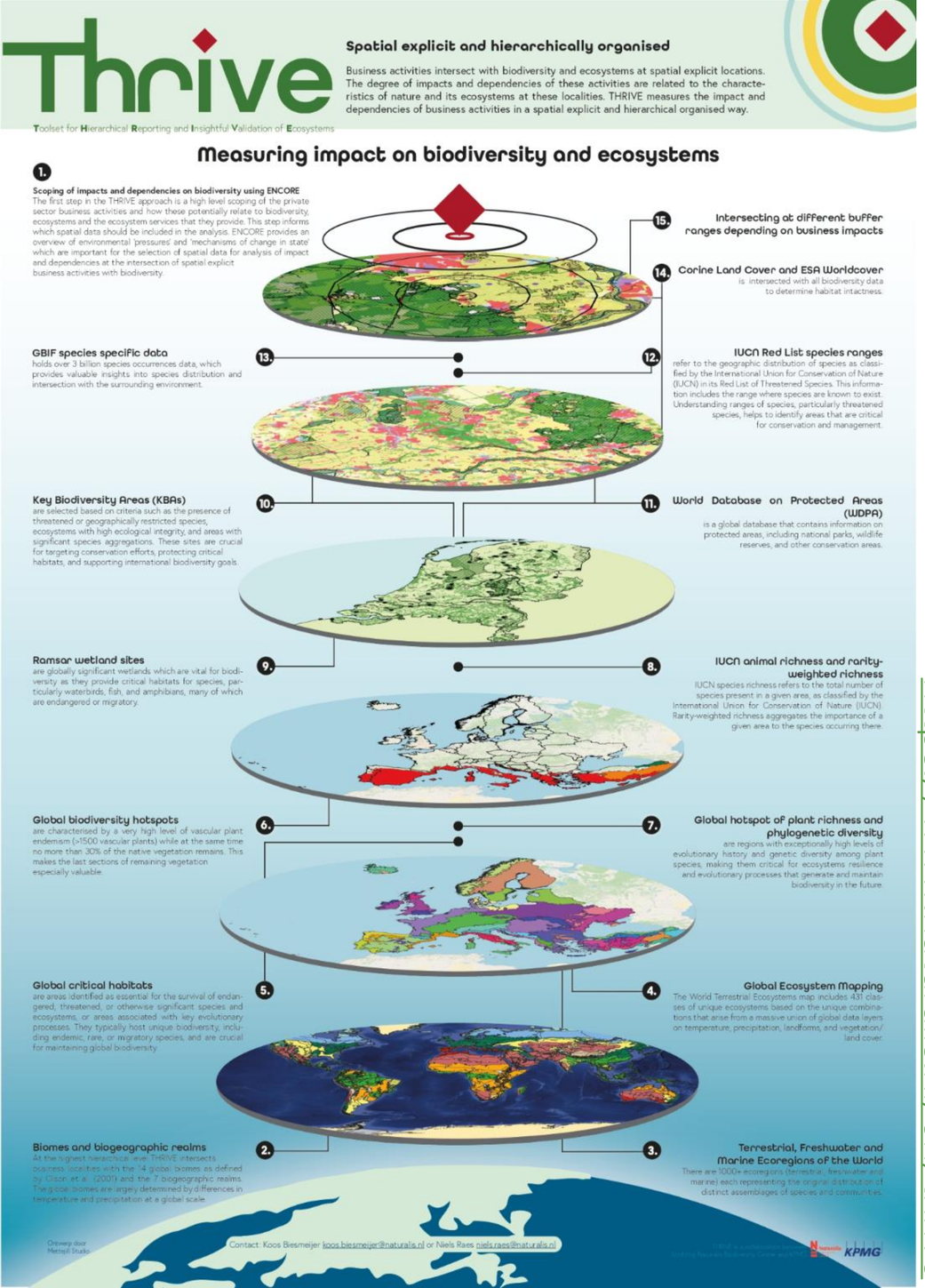
amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting

(Text with EEA relevance)

Update NLBIF

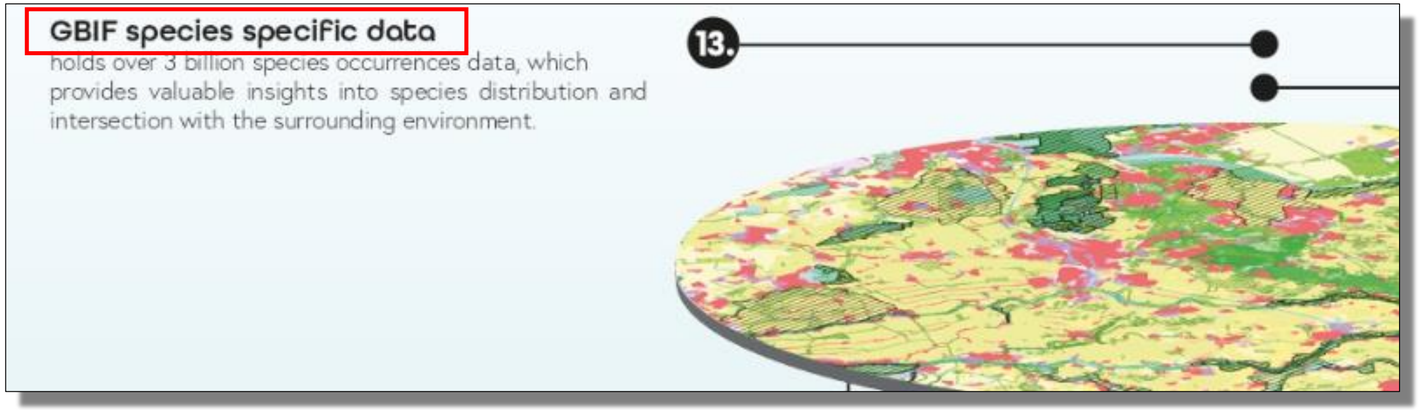


https://www.naturalis.nl/en/thrive

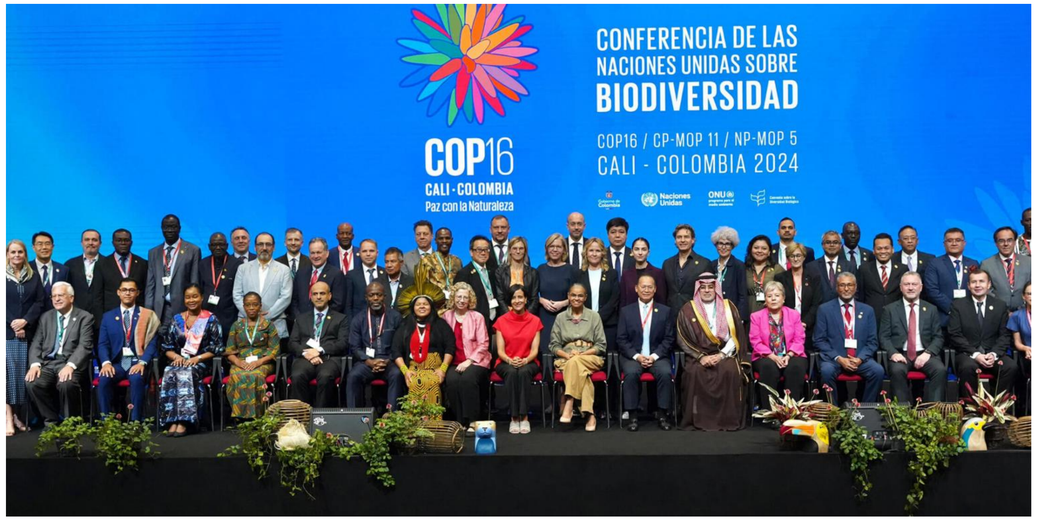


https://www.naturalis.nl/en/thrive

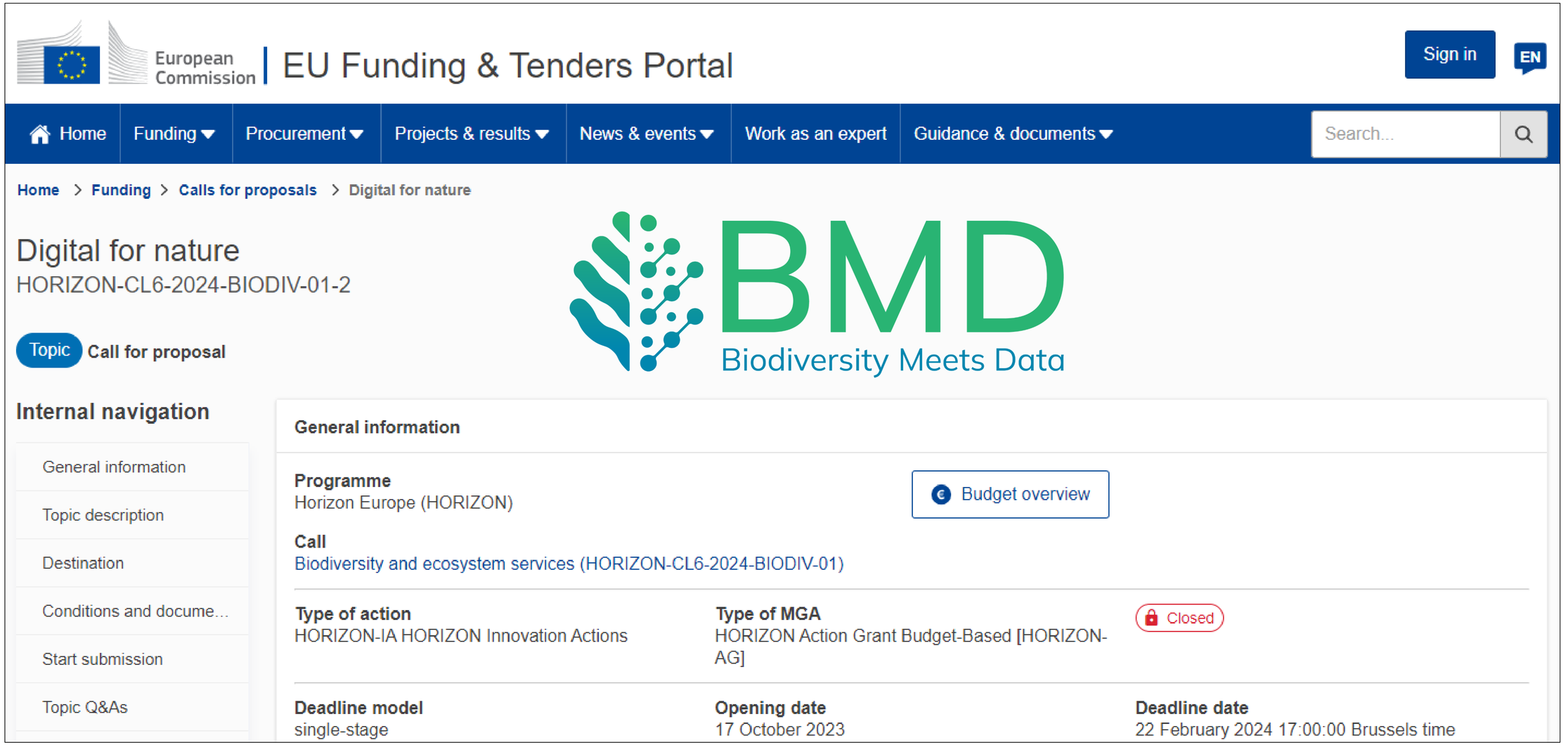
Update NLBIF



Gelanceerd voor COP16 in Cali, Colombia

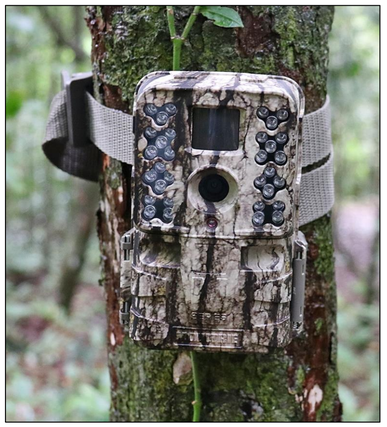


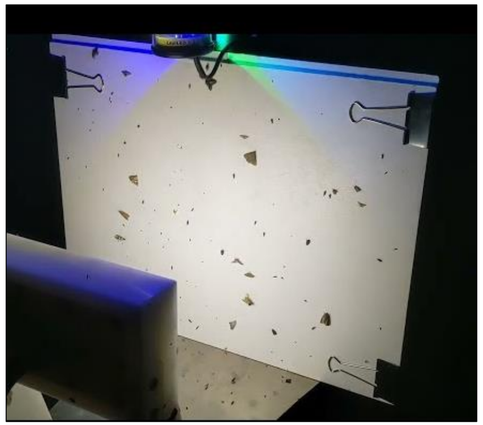
Update NLBIF

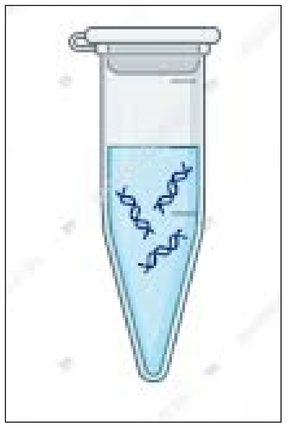


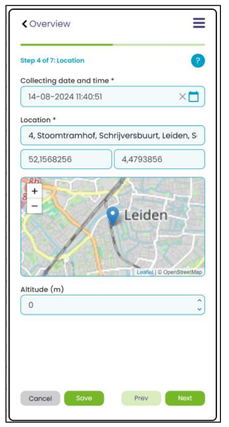
Expected Outcomes (EO) of BMD

1. A **better monitoring of biodiversity** in the EU by **high-throughput methods** (e-DNA, sound/image/spectral analysis, use of mobile platforms, …) leading to a better implementation of the Nature Directives (i.e. Habitats Directive and the Birds Directive).



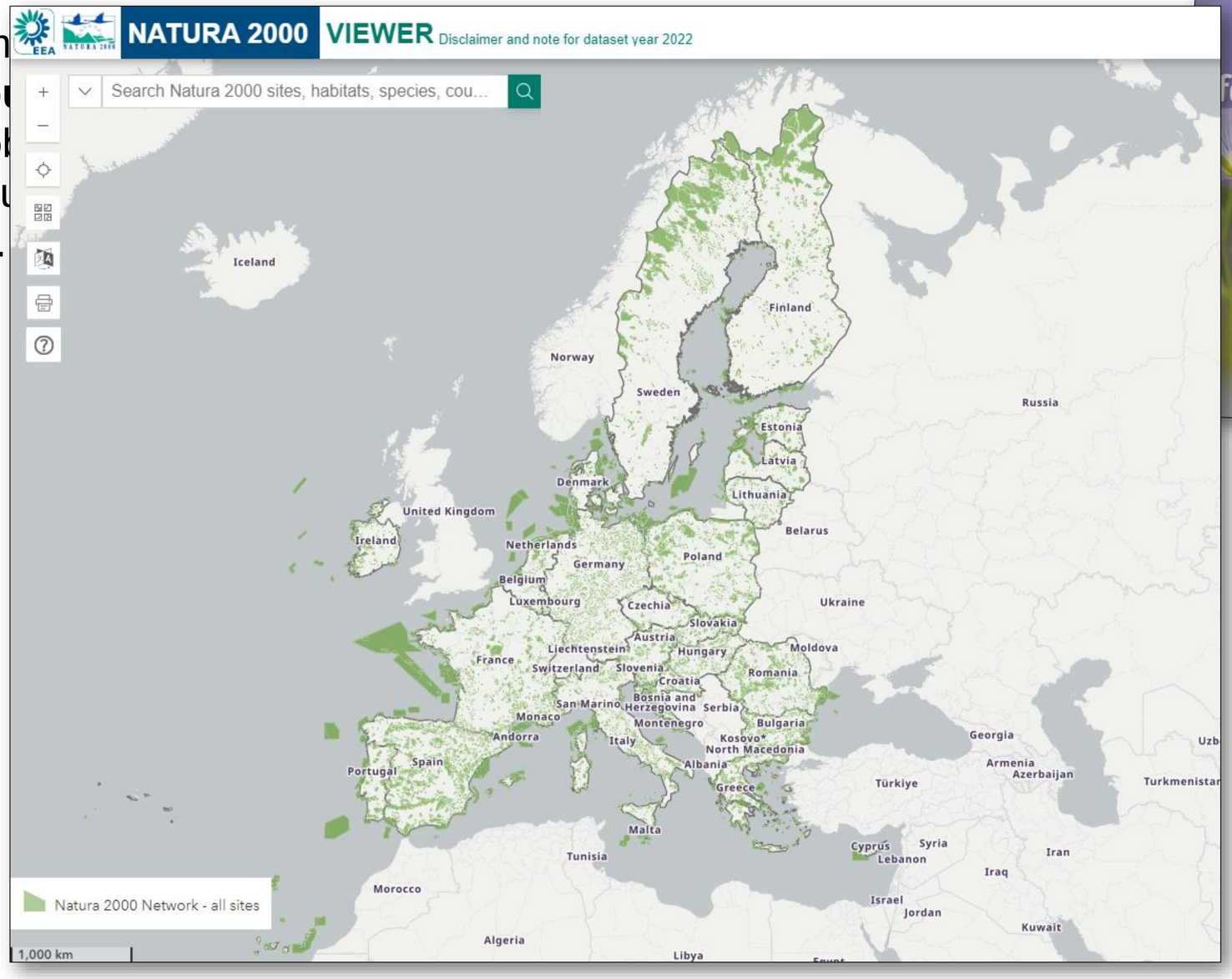






Expected Outcomes (EO) of BMD

1. A better m
   throughpu
   use of mob
   of the Natu
   Directive).

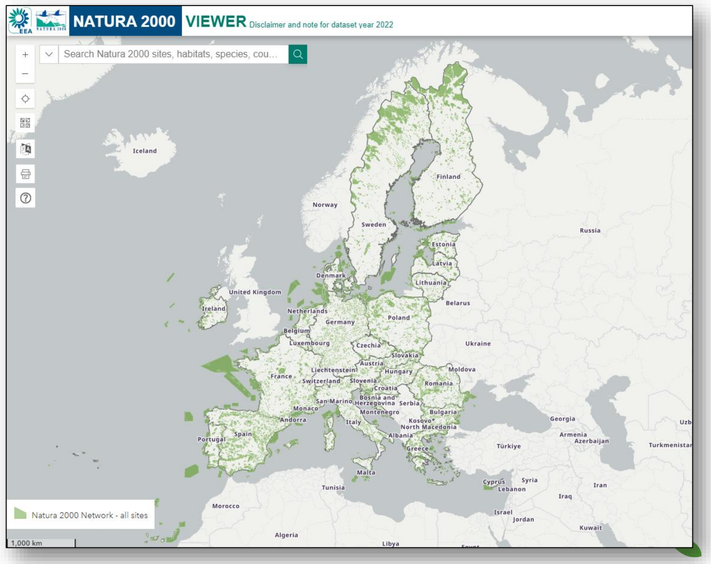


Expected Outcomes (EO) of BMD

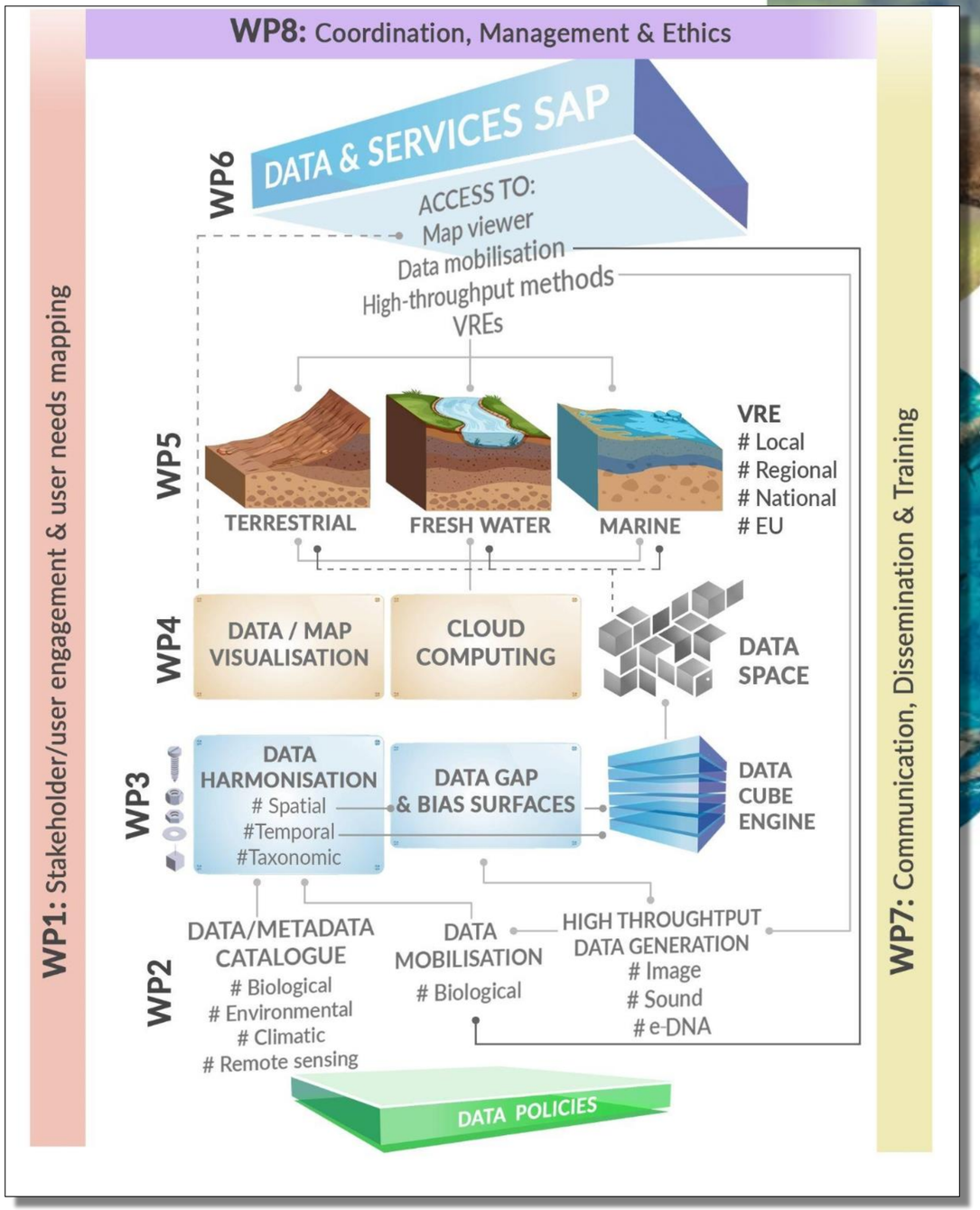
1. A better monitoring of biodiversity in the EU by **high-throughput methods** (e-DNA, sound/image/spectral analysis, use of mobile platforms, …) leading to a better implementation of the Nature Directives (i.e. Habitats Directive and the Birds Directive).

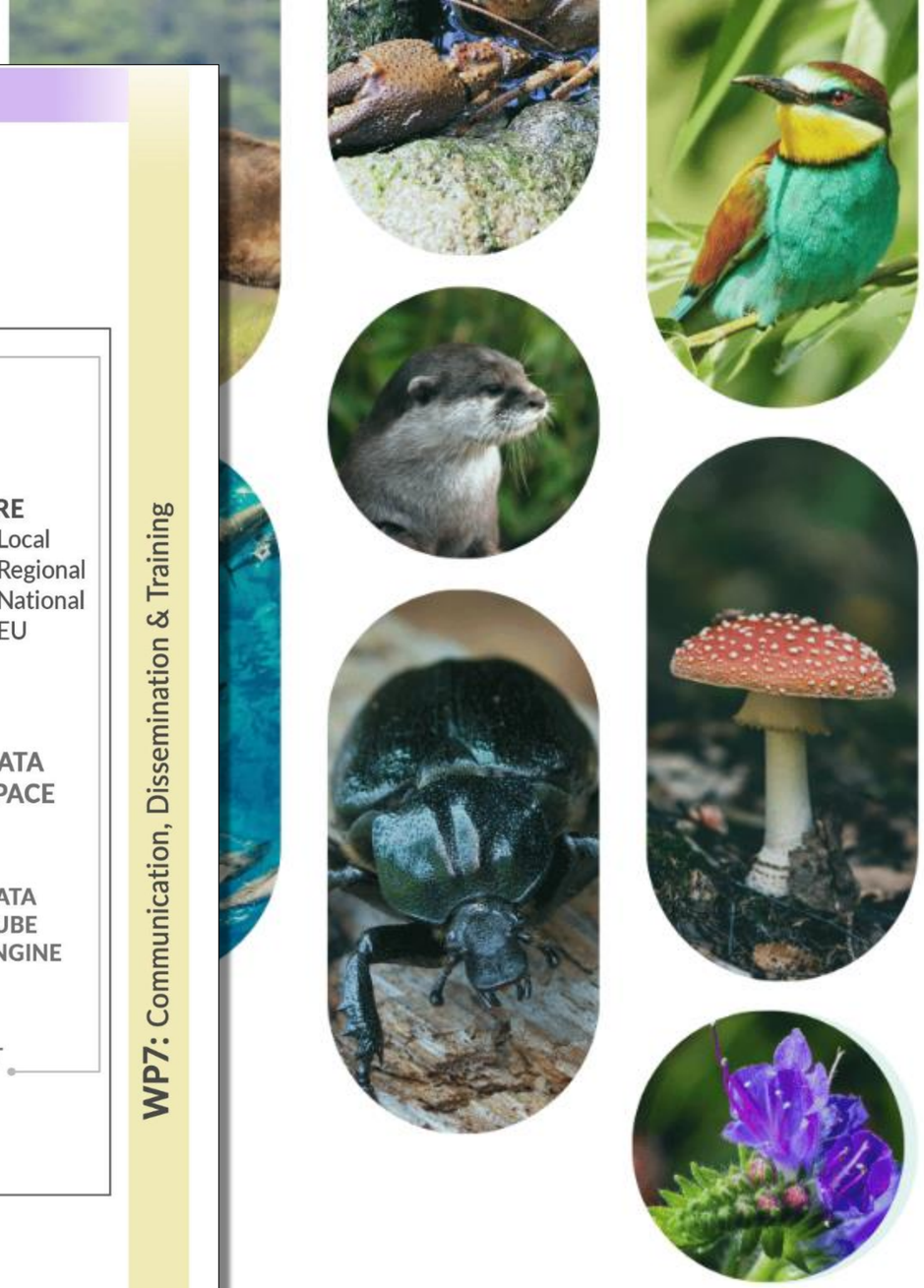
2. A better understanding of the state of nature and of the **drivers of biodiversity loss**, a better **usage of existing data** and therefor to **reverse biodiversity loss and to restore and protect ecosystems**.

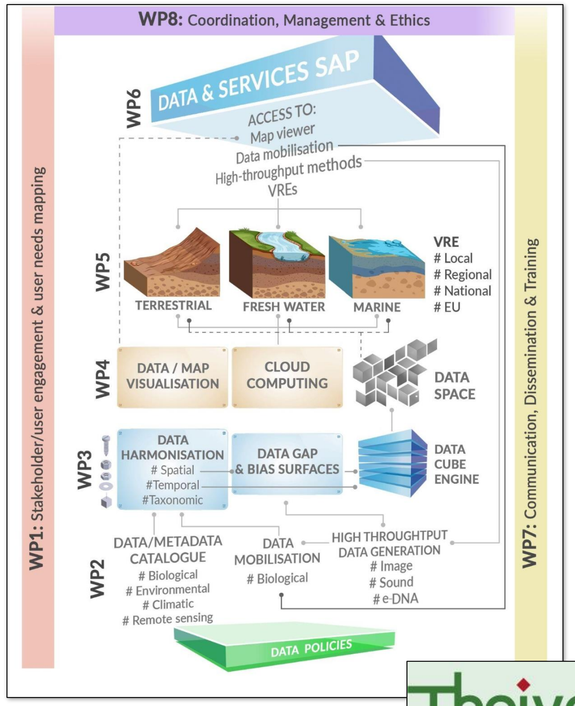
3. A more **complete view of the state of nature** and its evolution […].

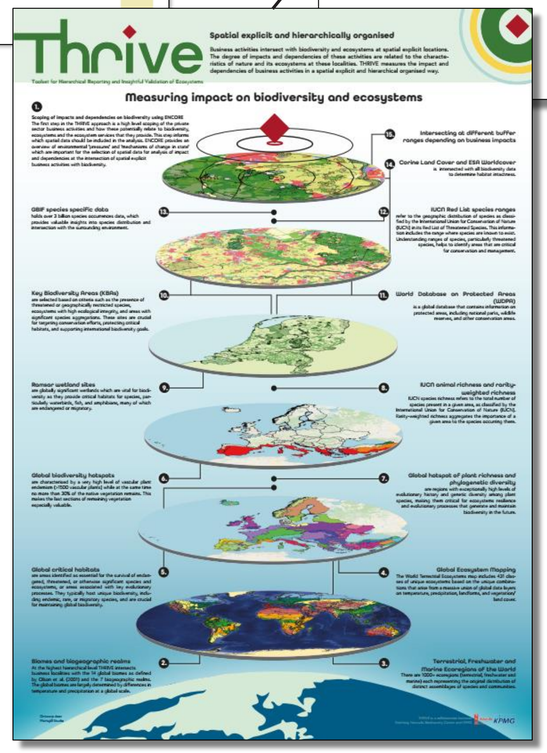


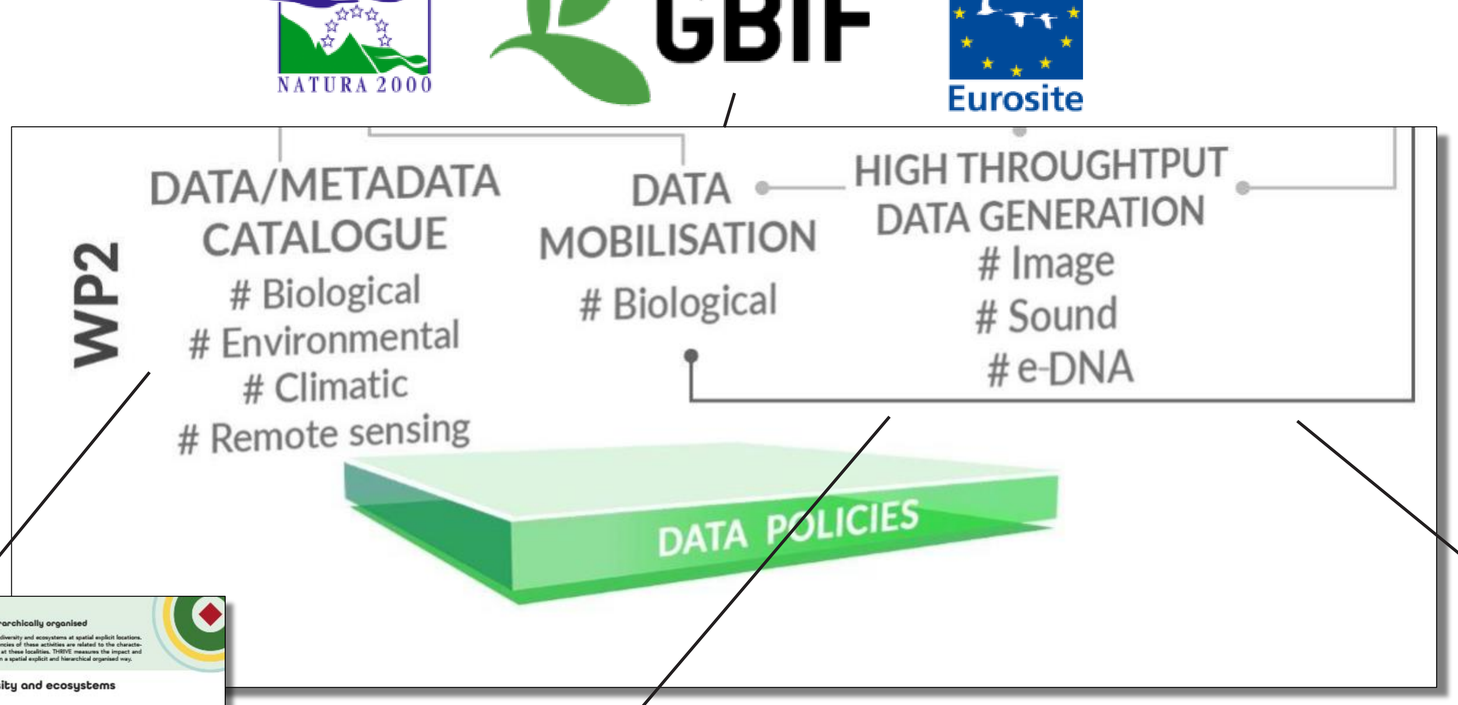
BMD
Biodiversity Meets Data

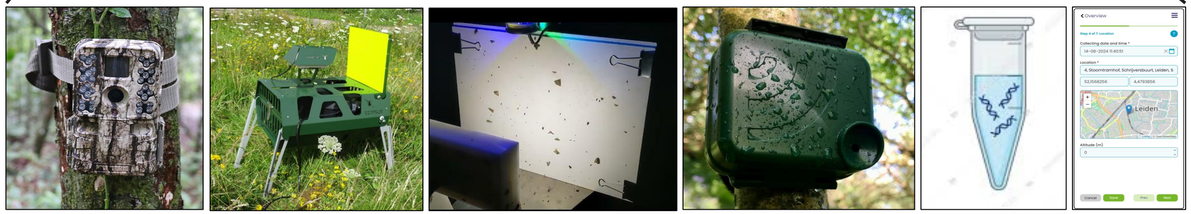












NATURA 2000

GBIF

Eurosite

ARISE arise-biodiversity.nl

Biodiversity Genomics Europe

MAMBO MODERN APPROACHES TO THE MONITORING OF BIODIVERSITY

DNAqua-Net

Noordzeker

etaplantcode

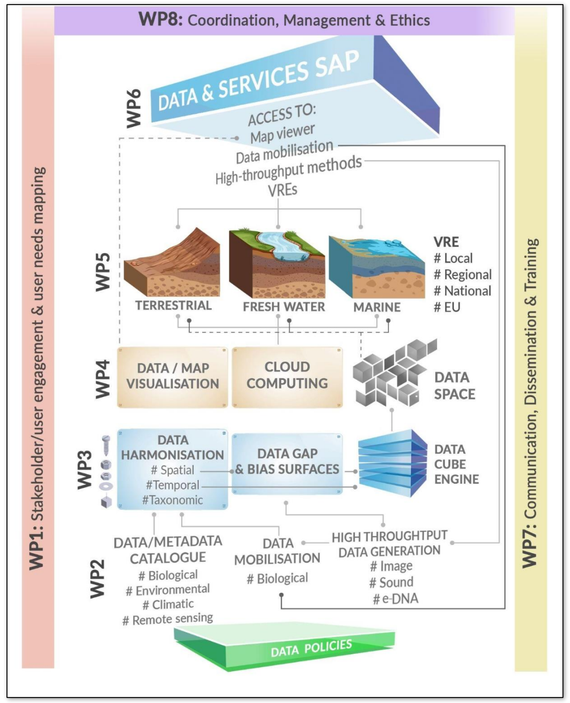
MARCO-BOLO

AI NATURE powered by Naturalis

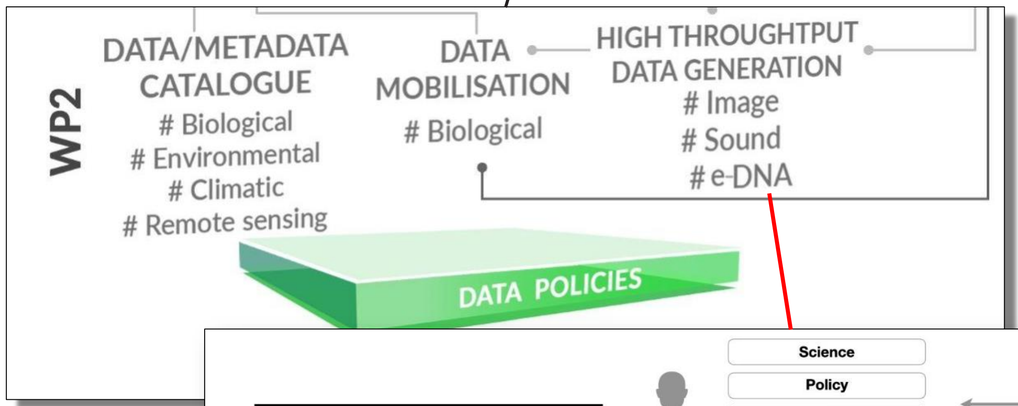
unite community

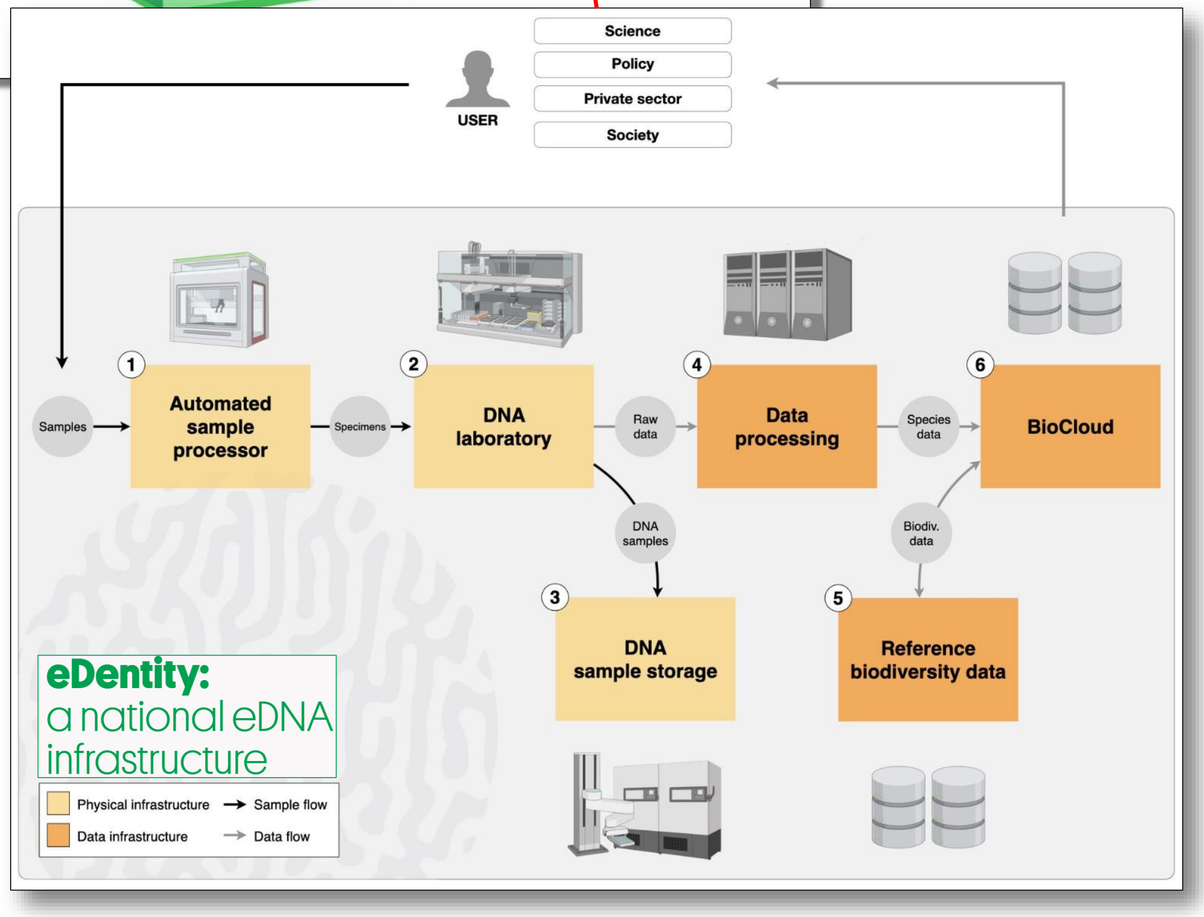
elixir

eDentity: a national eDNA infrastructure


WP8: Coordination, Management & Ethics
WP1: Stakeholder/user engagement & user needs mapping
WP7: Communication, Dissemination & Training
WP6
DATA & SERVICES SAP
ACCESS TO:
Map viewer
Data mobilisation
High-throughput methods
VREs
WP5
TERRESTRIAL
FRESH WATER
MARINE
VRE
Local
Regional
National
EU
WP4
DATA / MAP VISUALISATION
CLOUD COMPUTING
DATA SPACE
WP3
DATA HARMONISATION
Spatial
#Temporal
#Taxonomic
DATA GAP & BIAS SURFACES
DATA CUBE ENGINE
WP2
DATA/METADATA CATALOGUE
Biological
Environmental
Climatic
Remote sensing
DATA MOBILISATION
Biological
HIGH THROUGHTPUT DATA GENERATION
Image
Sound
e-DNA
DATA POLICIES

GBIF


WP2
DATA/METADATA CATALOGUE
Biological
Environmental
Climatic
Remote sensing
DATA MOBILISATION
Biological
HIGH THROUGHTPUT DATA GENERATION
Image
Sound
e-DNA
DATA POLICIES


Science
Policy
Private sector
Society
USER
Samples
1
Automated sample processor
Specimens
2
DNA laboratory
Raw data
4
Data processing
Species data
6
BioCloud
DNA samples
Biodiv. data
3
DNA sample storage
5
Reference biodiversity data
eDentity:
a national eDNA infrastructure
Physical infrastructure
Sample flow
Data infrastructure
Data flow

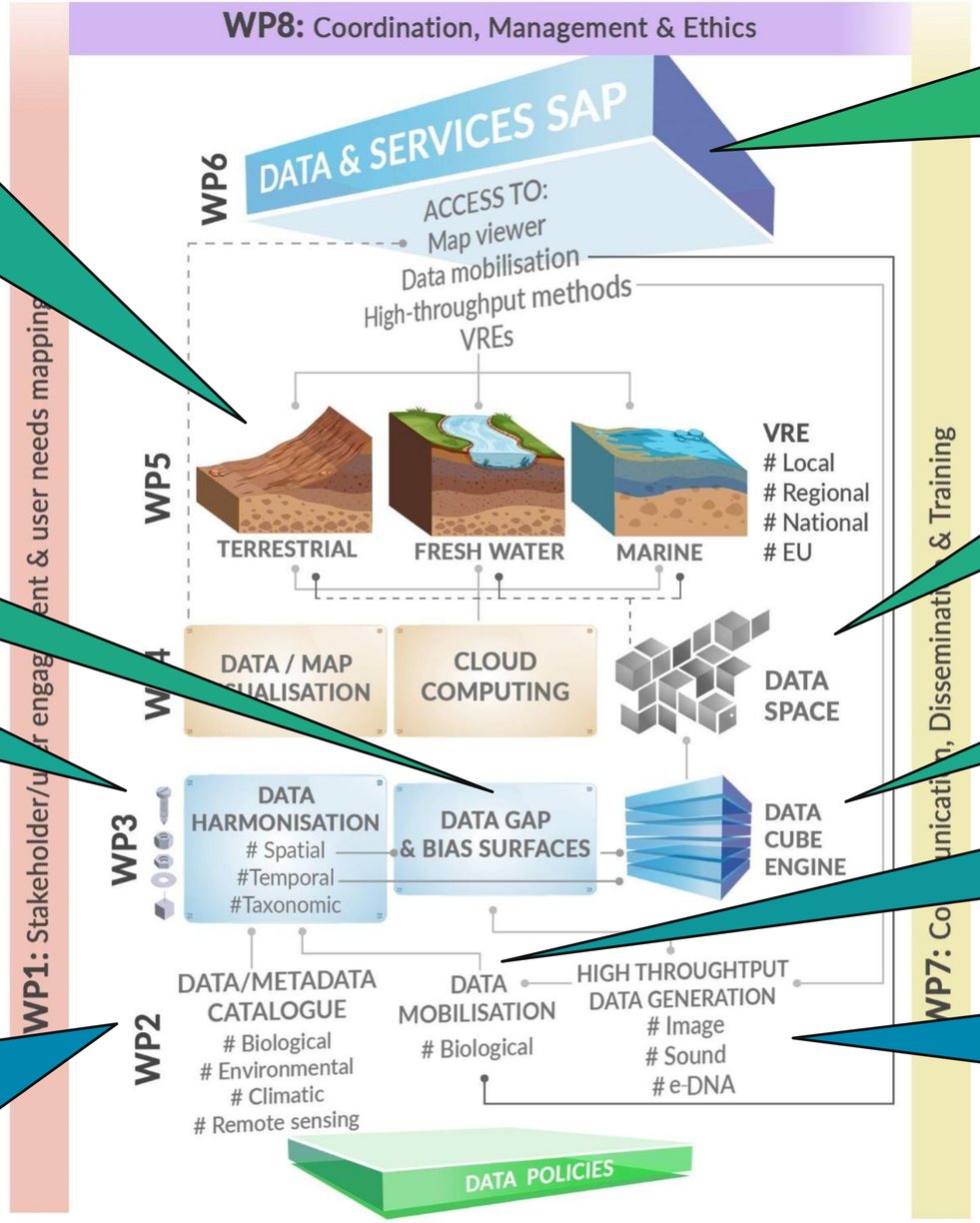
BMD
Biodiversity Meets Data

Virtual Research Environments (VREs) to analyse biodiversity trends and drivers of change in the terrestrial, freshwater and marine realms

Account for gaps and biases

Harmonise all data across space, time and taxonomy

Data catalogue with environmental, climatic, remote sensing data to be able to assess the impacts of change on species distributions



Single Access Point to biodiversity data, monitoring tools, data mobilisation, VREs and a map viewer

A powerful data space and cloud computing facilities

Develop custom data cubes for VRE analysis

Mobilising historical baseline data to GBIF

Plug-n-Play deployment of high-throughput biodiversity monitoring devices

NLBIF commissie

Voorzitter – Dr. Rob Hooft

- Health RI, voorheen Dutch Techcentre for Life Sciences

5 commissie-leden (lid voor 2 jaar)

- ~~Dr. Edwin Pos, Utrecht Universiteit (2e jaar)~~
- ~~Dr. Willem-Pier Vellinga, Xeno-Canto (2e jaar)~~
- Dr. Lien Reyserhove, Instituur voor Natuur- en Bosonderzoek (INBO)
- Dr. Anouschka Hof, Wageningen Universiteit
- Gijs Gerrits, NIOO-KNAW

NLBIF commissie

Voorzitter – Dr. Rob Hooft

- Health RI, voorheen Dutch Techcentre for Life Sciences

5 commissie-leden (lid voor 2 jaar)

- Dr. Lien Reyserhove, Instituut voor Natuur- en Bosonderzoek (INBO) - 2e jaar
- Dr. Anouschka Hof, Wageningen Universiteit -2e jaar
- Gijs Gerrits, NIOO-KNAW - 2e jaar
- Dr. Fiona Zachariasse, Natuurmuseum Brabant
- Thijs Bosch, Regelink Ecologie & Landschap

NLBIF-call 2025

NLBIF stelt voor 2025 een budget beschikbaar van € 238.000,- plus € 21.494,35 reserves via de NLBIF-call 2024. De maximale bijdrage aan een ingediend project bedraagt **€ 30.000,- (inclusief BTW)**. Aanvragen voor de NLBIF-call moeten in overeenstemming zijn met ten minste één van de volgende drie thema's:

A. **Data** - mobiliseren van bestaande biodiversiteitsdata naar GBIF.org, en/of;
B. **Infrastructuur** - infrastructurele ontwikkelingen die mobilisatie van biodiversiteitsdata naar GBIF.org faciliteren, en/of;
C. **Participatie** - Het NLBIF/GBIF-netwerk uitbreiden met nieuwe data-eigenaren en/of data-gebruikers.

Het ingediende projectvoorstel dient de volgende onderdelen te bevatten:

- **Titel** van het project.

- **Projectgroep;** namen/functies/organisaties van de hoofdaanvrager en medeaanvragers. De hoofdaanvrager is een Nederlandse organisatie of internationale organisatie met vertegenwoordiging in Nederland.

- **Aanleiding** van het project; Waarom dit project? Waarom nu? En waarom deze projectgroep?

- **Projectomschrijving** (Beschrijf de volgende onderdelen)

  - ➔ *Beschrijving van werkzaamheden;*
  - ➔ *Verwachte resultaten die bij afronding van het project opgeleverd worden;*
  - ➔ *Impact en urgentie van het project (zie selectiecriterium 1);*
  - ➔ *Meerwaarde van het project (zie selectiecriterium 2);*
  - ➔ *Efficiëntie en kosteneffectiviteit (zie selectiecriterium 3);*
  - ➔ *Duurzaamheid van het project (zie selectiecriterium 4);*
  - ➔ *Haalbaarheid van het project (zie selectiecriterium 5).*

- **Planning**, GANTT chart, inclusief mijlpalen voor projectonderdelen. De duur van het project is 1 jaar en start uiterlijk op 31 december 2024.

- **Begroting** (exclusief BTW, inclusief BTW, of BTW niet van toepassing).
  In het geval van medefinanciering graag beschrijven op welke wijze sprake is van medefinanciering en hoe de projectresultaten veranderen als de medefinanciering niet wordt toegekend.

Selectiecriteria

Alle ingediende voorstellen worden beoordeeld door ten minste drie leden van de onafhankelijke NLBIF beoordelingscommissie. Het besluit over de toekenning van een NLBIF-bijdrage gebeurt in een vergadering van de NLBIF-beoordelingscommissie, onder leiding van de voorzitter dr. Rob Hooft. Alle ingediende voorstellen worden beoordeeld op de onderstaande criteria. De totaal te behalen score is 50.

1. **Impact en urgentie** (score 1-10) - De bijdrage van het project met betrekking tot de prioriteiten en activiteiten uit het GBIF strategisch plan 2023-2027 (Tabel 1) en/of het afgeleide werkprogramma 2025 zijn duidelijk in kaart gebracht en relevant.
2. **Meerwaarde** (score 1-10) - Het project levert een meerwaarde (significant en meetbaar) t.o.v. de huidige situatie. Bijvoorbeeld en uitsluitend indicatief:
   Data: aantal records, kwaliteit van de records, detail van de records;
   Infrastructuur: faciliteren van data-uitwisseling met GBIF, connectie met andere infrastructuren;
   Participatie: meer gebruik van gegevens, meer publicaties (geef indicatie).
3. **Efficiëntie en kosteneffectiviteit** (score 1-10) - Er wordt optimaal gebruikgemaakt van reeds aanwezige kennis, technologie en infrastructuur en de financiële middelen worden optimaal benut.
4. **Duurzaamheid** (score 1-10) - Het project levert duurzame producten of diensten. Bijvoorbeeld en uitsluitend indicatief:
   Data - is de beschikbaarheid voor de lange termijn geborgd en/of vinden er regelmatig updates naar GBIF plaats;
   Infrastructuur - zijn de infrastructurele ontwikkelingen bruikbaar voor de hele GBIF-gemeenschap en/of is de broncode van programmatuur 'open source';
   Participatie - worden belanghebbenden gestimuleerd om voor langere tijd te participeren met GBIF en/of blijvend gebruik te blijven maken van GBIF-data.
5. **Haalbaarheid** (score 1-10) - Hoe realistisch is het dat de beoogde doelen en mijlpalen worden gehaald en zijn de risico's geïdentificeerd?

Vragen ?

Wat kan NLBIF voor jou betekenen?

- NLBIF cursus aanbod:
  - Data mobiliseren naar GBIF - basis
  - Data mobiliseren naar GBIF - advanced
  - Cursus Metabarcoding Data Toolkit
  - Hoe maakt ik optimaal gebruik van GBIF.org ?
  - Hoe gebruik ik de GBIF API ?
- NLBIF gaat dit jaar in samenwerking met ARISE, eDentity, en BMD werken aan een biodiversiteits dataviewer op de GBIF data. Aan welke voorwaarden zou een viewer moeten voldoen ?
- Welke periode is het meeste geschikt voor een cursus ?
- … vul maar in