



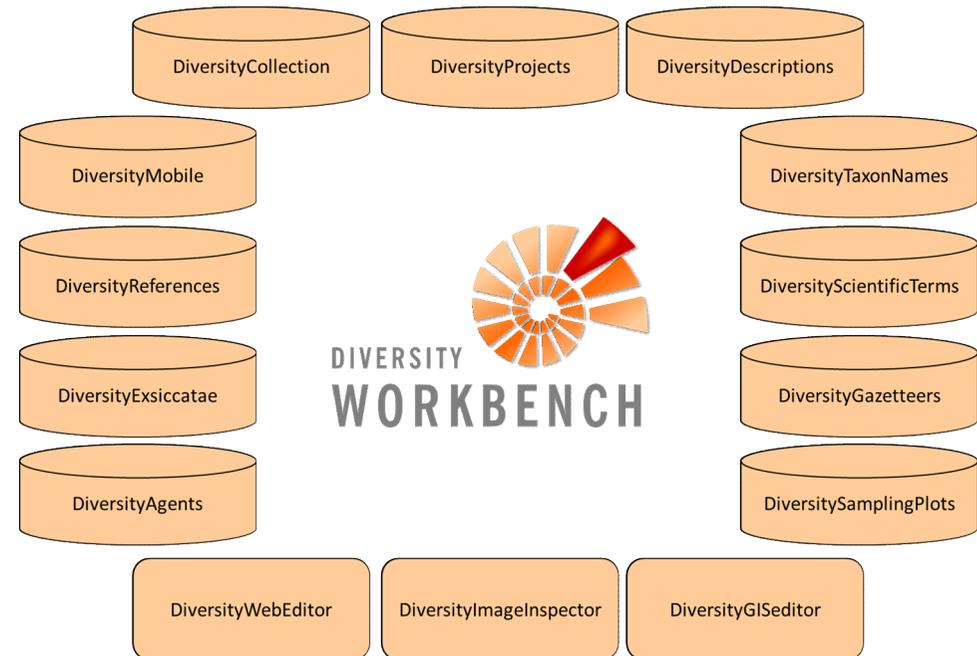
Diversity Workbench

Einführung

Dagmar Triebel

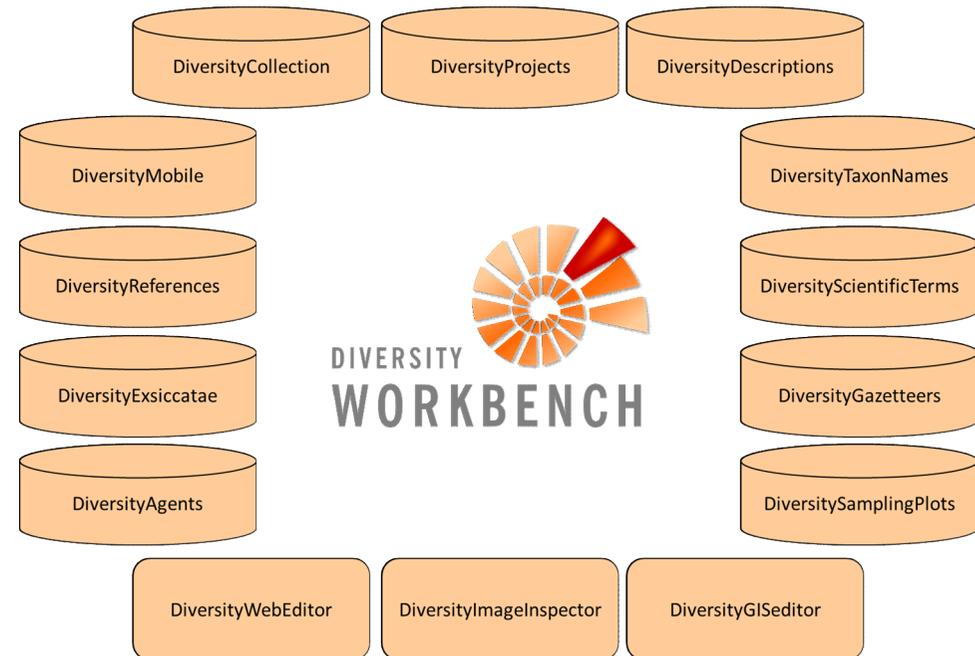
DWB – System aus SQL-Datenbanken

- 11 Datenbanken als Werkzeuge zum Datenmanagement nach Datendomänen
- Direkte Interoperabilität von Datenbank-Komponenten untereinander und mit den drei weiteren Tools zur Datenprozessierung



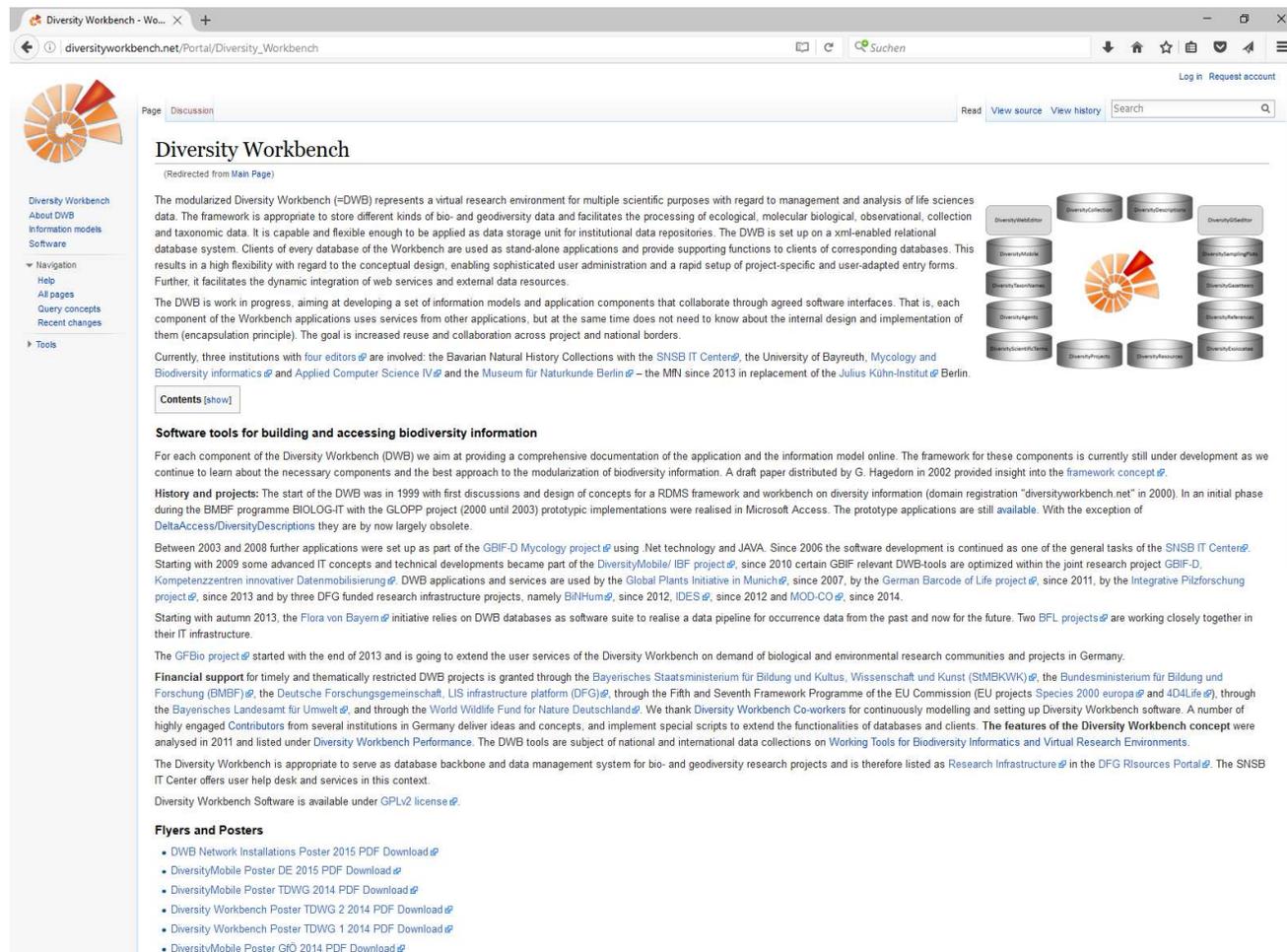
DWB – System aus SQL-Datenbanken

- Diversitätsdatensätze aus Bio- und Geowissenschaften; aus allen organismischen Großgruppen: Pflanzen, Algen, Pilze, Wirbeltiere, Insekten; Fossilien, Gesteine, Mineralien
- Sammlungsdaten, Monitoringdaten, ökologische und molekulare Daten
- Geeignet als Datenmanagement-System für Datenzentren / naturwissenschaftliche Sammlungen, aber auch für einzelne Forscher und große Forschungsprojekte



DWB – Dokumentation online

- www.diversityworkbench.net



The screenshot shows the Diversity Workbench website in a browser window. The page title is "Diversity Workbench" and it is noted as "(Redirected from Main Page)". The main content area describes the modularized Diversity Workbench (DWB) as a virtual research environment for multiple scientific purposes. It details the framework's capabilities for storing and processing ecological, molecular biological, and taxonomic data. A diagram on the right side of the page illustrates the system architecture, showing a central orange sun-like logo surrounded by various database and tool components such as DiversityMobile, DiversityAgents, DiversityProjects, and DiversityResources. The page also includes a "Contents" section with a "show" link, a "Software tools for building and accessing biodiversity information" section, and a "Flyers and Posters" section listing several PDF documents for download.

DWB – Dokumentation online

- Technische Dokumentation

Technical documentation for the core applications and rich clients

Name of the database framework	Diversity Workbench (DWB)
DWB contact persons	T. Weibulat, D. Triebel at the SNSB IT Center 
Operating system server	MS Windows Server 2008 R2, 2012 R2
Database system	MS SQL-Server 2008 R2 to MS SQL-Server 2014 
Clients	C# desktop applications (local clients) (and web APIs for various projects)
Operating system local clients	MS Windows XP (not recommended), MS Windows 7 to MS Windows 10
GIS functionalities	GIS-Editor , management of geometry and geography data
GUIs for data import	Import-Wizards, txt, CSV, xml in various schemes, xml/xslt, shapes in ESRI-Format
GUIs for data export/ reports	Export-Wizards, txt, CSV, xml in various schemes, xml/xslt, shapes in ESRI-Format
GUI language	default: english (multilingual through translation tables)
Open access	DWB software download
Open source	DWB SVN code repository  , DiversityMobile GitHub repository 
Licenses	GPL v.2
Information models online	DWB data models
State of development	since 1999, ongoing
Code language, developer platform	C#, .Net Framework 3.5
User manuals	under DWB user manuals and with the download of the respective applications in the DWB Wiki
Training	DWB workshops  for users and database administrators since 2007

DWB – Dokumentation online

- Download von (Client-)Software: Beta-Versionen und offizielle Releases

<http://diversityworkbench.net/Portal/Software>

DiversityCollection [\[edit\]](#)

[Hide] [Download the Client software 3.0.8.9 z71 \(zip archive\)](#), 2017/10/25

New features and fixes:

- User can not change password
- Call back if application should be closed
- Non biological taxonomic group (e.g. rock, mineral) connect to DiversityScientificTerms for a name thesaurus [Manual: Identification, Organism](#)
- Show or hide relation details
- Display of subcollection content: Bugfix
- Display of query fields: Bugfix
- Adding external identifiers to references
- Administration of Datawithholding for the collection date: Bugfixes
- Labelprint: TransactionTitle added
- Labelprint Bugfix: rank subsp. was not detected, infos from DiversityTaxonNames included, transactions did not appear in multilabelprint [OK \(C. Monje\)](#)
- Extension of remote sources with projects [OK Manual: Customize - Settings \(D. Triebel\)](#)
- Identification: bugfix when inserting default identifier URI without identifier [OK](#)
- Setting the resources directory (Administration - Resources directory) [OK \(P. Grobe\)](#); [Manual: Customize](#)
- TK25 - updated form for getting the coordinates, bugfix
- Distribution maps: Bugfix
- Display of analysis in overview including date and number [OK](#)
- Create stable identifier for whole database [OK \(T. Weibulat\)](#); [Manual: Stable identifier](#)
- Links to module entries for local databases - bugfix
- Choosing entry from linked modules via keyboard and space key [OK \(A. Rosenbauer\)](#); [Manual: Module related entry](#)
- Analysis administration: several columns for query added [OK](#)
- Stock - removing enabled [OK \(D. Neumann\)](#)
- Setting timeout for database updates for Postgres only [OK Manual: Cache database packages \[?\]](#)
- Showing processing ID in interface [OK](#)



[Inhaltsverzeichnis \[Anzeigen\]](#)

[Technical documentation at a glance](#)

[General Download Notes](#)

[How to create a personal local DWB environment](#)

[Diversity Workbench core applications, databases and rich clients](#)

Regular software releases are available *for download* under the respective application.

- DiversityAgents – **Last Version:** April, 2018
- DiversityCollection – **Last Version:** April, 2018
- DiversityDescriptions – **Last Version:** February, 2018
- DiversityExsiccatae – **Last Version:** April, 2018
- DiversityGazetteers – **Last Version:** March, 2018
- DiversityGisEditor – **Last Version:** March, 2018
- DiversityImageInspector – **Last Version:** October, 2017
- DiversityMobile – **Last Version:** March, 2015
- DiversityProjects – **Last Version:** April, 2018
- DiversityReferences – **Last Version:** April, 2018
- DiversityResources
- DiversitySamplingPlots – **Last Version:** March, 2018
- DiversityScientificTerms – **Last Version:** April, 2018
- DiversityTaxonNames – **Last Version:** April, 2018

DWB-Entwickler und DWB-Open Source Code

z. Zt. 4 DWB Entwickler an den SNSB

- Quellcode in 2 Code-Repositories
- Quellcode-Zeilen >1.7 Mill.
(in 3.322 Quellcode-Dateien)
(Status 8.2018)
- Angepasste Services werden derzeit
an der UBT, SMNK und ZFMK
entwickelt

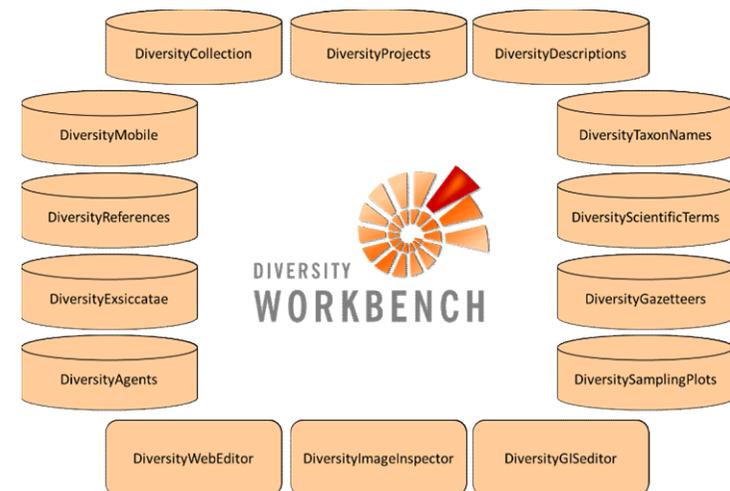
The image shows two overlapping browser windows. The top window displays the Subversion repository for DiversityWorkbench at `svn.snsb.info/repos/DiversityWorkbench`. The page title is "DiversityWorkbench: Developer Tools - Subversion". The main content area shows a directory listing for the "/trunk" path, including a "[Parent Directory]" link and various subdirectories such as "DiversityAgents/", "DiversityCollection/", "DiversityDescriptions/", "DiversityExsiccatae/", "DiversityGazetteer/", "DiversityImageInspector/", "DiversityMaintenance/", "DiversityMobile/", "DiversityProjects/", "DiversityReferences/", "DiversitySamplingPlots/", "DiversityScientificTerms/", "DiversitySynchronization/", "DiversityTaxonNames/", "DiversityWorkbench/", "DiversityWorkbench4/", "HelpProjects/", "HelpProvider/", "XMLParser/", and "DiversityWorkbench.sln".

The bottom window shows the GitHub repository for "Staatliche Naturwissenschaftliche Sammlungen Bayerns" at `https://github.com/SNSB`. The page title is "Staatliche Naturwissenschaftliche Sammlungen Bayerns". The main content area displays a list of repositories with their respective languages, stars, and update dates. The repositories listed are:

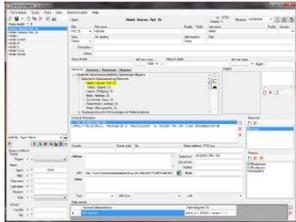
- DWB-Contrib**: DWB-Contrib Schemes and files as contribution for DWB clients: e. g., to organise import, export and label print. Updated 12 days ago. XSLT ★ 0 | 0
- DiversityMobile2**: Prototype of a cross-platform application using the Diversity REST API. Updated on 17 Dec 2015. JavaScript ★ 0 | 0
- DiversityMobile**: DiversityMobile Client Application for Windows Phone 7/8 Phones. Updated on 4 Sep 2015. CF ★ 2 | 2
- DiversityService**: SOAP based API for DiversityCollection. Currently used by DiversityMobile client application. Updated on 27 Aug 2015. CF ★ 0 | 1
- DiversityAPI**: REST Service API for DiversityCollection. To be used by DiversityMobile client application. Updated on 20 Aug 2014. CF ★ 0 | 1

Anzahl der DWB-Anwender mit DB-Installationen (soweit bekannt)

- Installationen an den SNSB inkl. ZSM
(diverse VM und Instanzen; inkl. Datenbank(DB)-Hosting
für rund 25 Partnerorganisationen; v.a. Universitäten) z. Zt. 250 Anwender
- Installationen am ZFMK z. Zt. 50-? Anwender
- Installationen am SMNK z. Zt. 20 Anwender
- Installationen am SMNS z. Zt. 25 Anwender
- Weitere Installationen ? > 50 Anwender

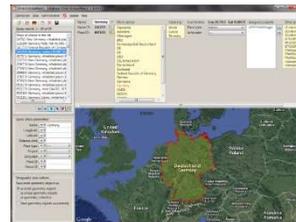


Terminologien, Referenzen, Vokabularien.....



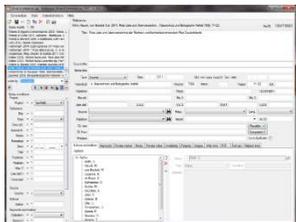
DiversityAgents

Management von Personen und Organisationen



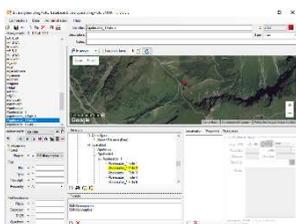
DiversityGazetteers

Management von geographischen Thesauri, oft mit Ortsbeschreibung und GIS Information



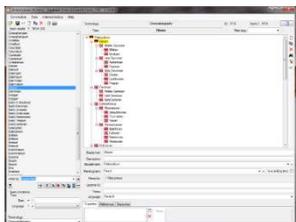
DiversityReferences

Management von Literaturreferenzen und Literaturdokumenten



DiversitySamplingPlots

Management von Beobachtungsgebieten und Untersuchungsflächen als Geobjekte, oft mit GIS Information und Hierarchien



DiversityScientificTerms

Management von Ontologien, Terminologien, Vokabularien ohne GIS Bezug, mit Hierarchien

Diversity Workbench – Schnittstellen zum Datenmanagement

The screenshot displays the Diversity Workbench software interface, which is used for managing biological specimen data and taxonomic information. The interface is divided into several main windows:

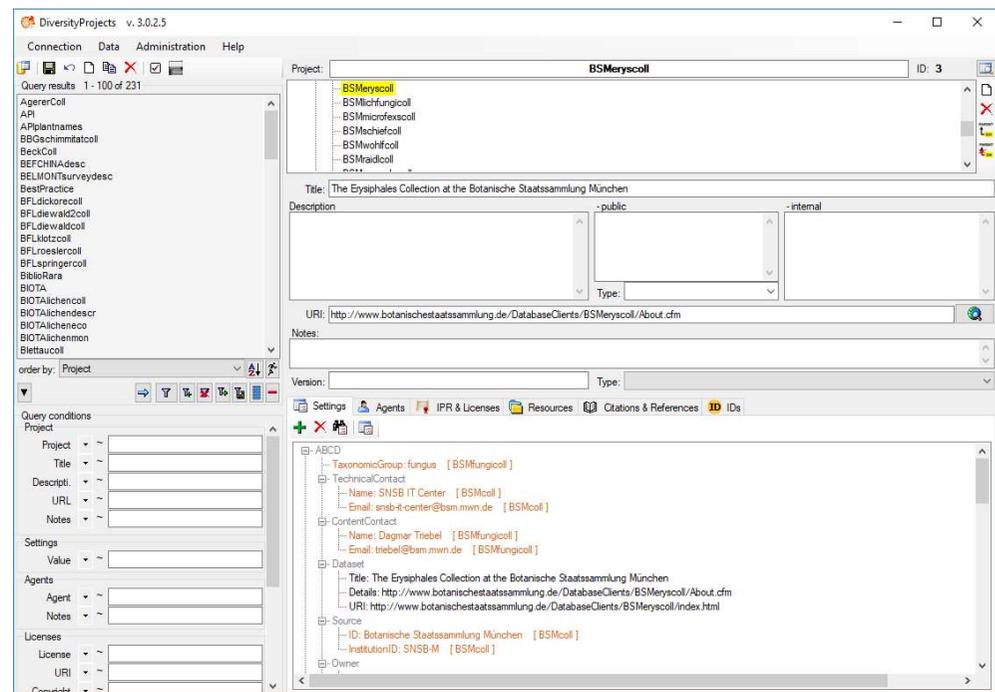
- DiversityCollection v. 3.0.3.6:** Shows specimen details for *Ceratotherium simum* (Burchell, 1817) with specimen ID 178065 and event version 20971. It includes a list of displayed fields and a table of specimen records.
- DiversityScientificTerms v. 3.0.0.0:** A hierarchical tree view of scientific terms, currently showing the 'Induan' period. It includes a search bar and various filters.
- DiversityAgents v. 3.0.0.3:** A window for managing agents, showing details for 'Hertel, Hannes, Prof. Dr.' with ID 12732. It includes fields for title, given name, and affiliation.
- DiversityTaxonNames, Database: DiversityTaxonNames_Fungi v. 3.0.1.5:** A detailed taxonomic record for *Biatora sylvana* Korb. It includes taxonomic name, nomenclature, taxonomic reference, and a list of synonyms.

The specimen table in the DiversityCollection window shows the following data:

Accession number	Collection year	Country	Locality
SAPM-MA-00129		Germany	Deutsche
SAPM-MA-00130	1988	Germany	Deutsche
SAPM-MA-00131	1995	Germany	Deutsche
SAPM-MA-00132	1998	Germany	Deutsche
SAPM-MA-00133		Germany	Deutsche
SAPM-MA-00134	1988	Inda	Inda, Inda (I)
SAPM-MA-00135	1988	Inda	Inda, Inda (I)
SAPM-MA-00136	1988	Germany	Deutsche
SAPM-MA-00137		Germany	Deutsche
SAPM-MA-00138		Germany	Deutsche
SAPM-MA-00139		Germany	Deutsche
SAPM-MA-00140		Germany	Deutsche
SAPM-MA-00141	1998	Germany	Deutsche
SAPM-MA-00142	2000	China	China, Ost
SAPM-MA-00143		South Africa	Südafrika
SAPM-MA-00144		South Africa	Südafrika
SAPM-MA-00145	1988	South Africa	Südafrika
SAPM-MA-00146		Germany	Deutsche
SAPM-MA-00147	1989	Germany	Deutsche
SAPM-MA-00148	1990	Germany	Deutsche
SAPM-MA-00149	1991	Germany	Deutsche
SAPM-MA-00150	1992	Germany	Deutsche
SAPM-MA-00151	1993	Germany	Deutsche
SAPM-MA-00152	1993	Germany	Deutsche

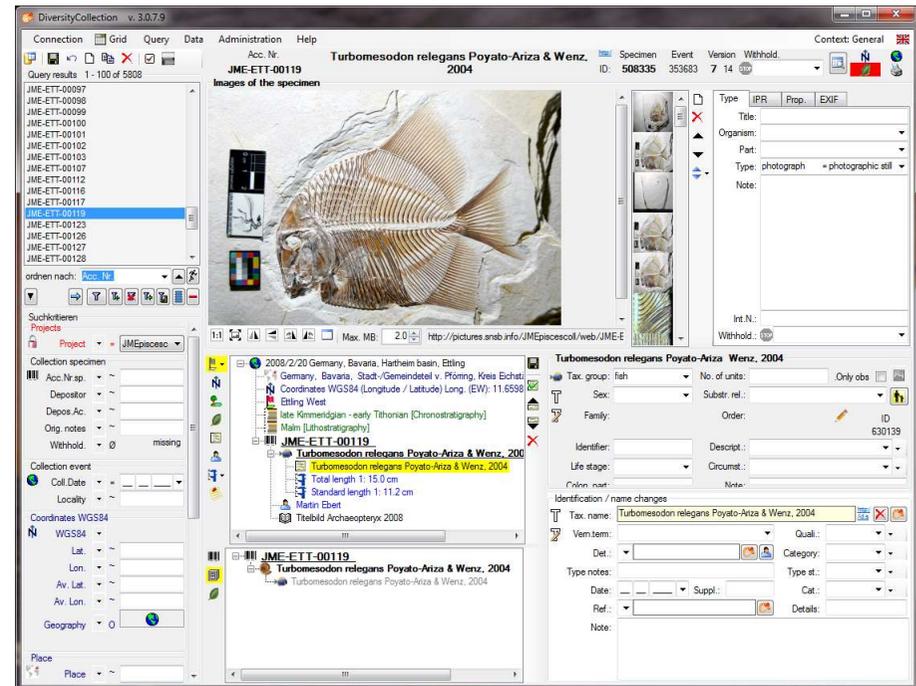
DiversityProjects (DP)

- Management von Datenpaketen, Datensammlungen und Datenprojekten, verknüpfte Information, wie Titel, Projektbeschreibungen, Lizenzen, key words, Projekt-Mitarbeiter und Verantwortliche
- Management von Projekthierarchien, Projekt-Settings, Identifiers, e. g. URIs und DOIs für Datenpakete
- Erstellung von Exportroutinen zur Publikation von Datenpaketen mit Zitaten, Zusammenfassungen, etc.

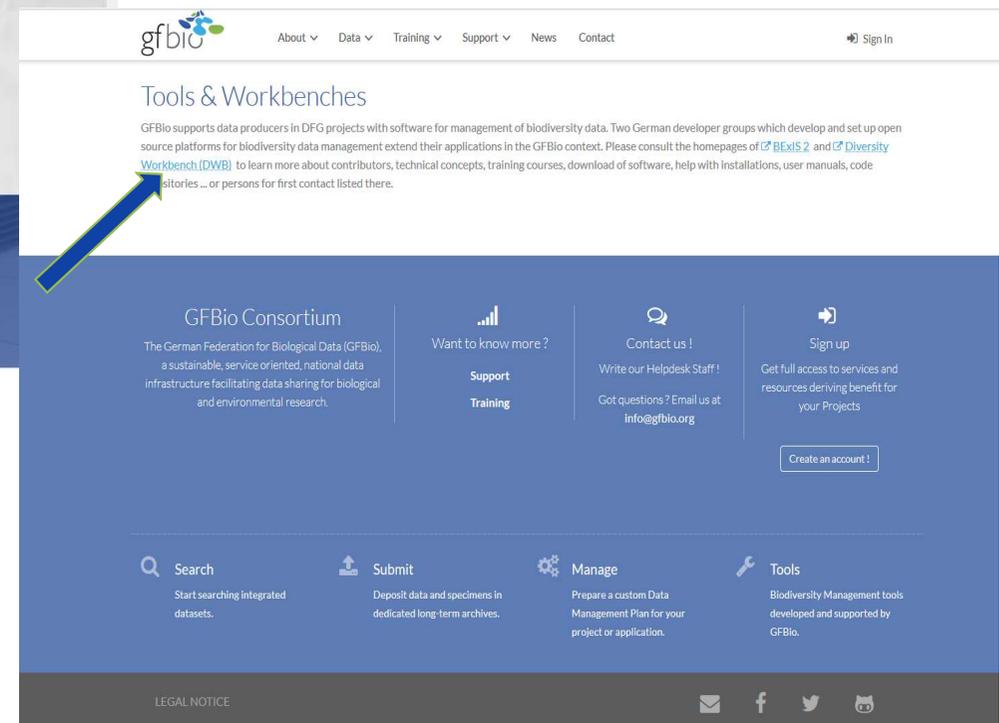


DiversityCollection (DC)

- Management von Beobachtungs- und Sammlungsdaten
 - Beobachtungs-Ereignisse, Expeditionen
 - Identifikation von Objekten
 - Administration von Objekttransfer (Ausleihe, Inventarisierung)
 - Präparation und Lagerung von Objekten
 - Experimente und Analysen
 - Verwaltung von Multimediaobjekten
- Druckoptionen: Reporte, Etiketten
- Erzeugung von Verbreitungskarten



DFG und GFBio: DWB empfohlen



GFBio: <https://www.gfbio.org/data/tools>

DWB in 10 Questions

- + What is DWB?
- + For whom is DWB designed?
- + Which part of the data life cycle is primarily addressed?
- + What are features helping researchers during their individual research process?
- + What are functions relevant for data managers in research groups?
- + How could I use DWB?
- + How does DWB cooperate with the GFBio tools for data submission and publication?
- + What are the technical prerequisites to use DWB?
- + Is there technical support by the DWB developer team?
- + Is there advice on scientific data curation by DWB data teams?



DWB und GFBio

- GFBio Submission und DiversityProjects
- DWB Management und Cache-Datenbanken

1. Describe your Dataset

Title*
Provide a short, descriptive title for your dataset.

Description*
Provide a summary of the work you did to produce the dataset (similar to an article abstract).

Study Type*
Select the type of sequencing in your dataset. Choose 'Other' if you are not sure.

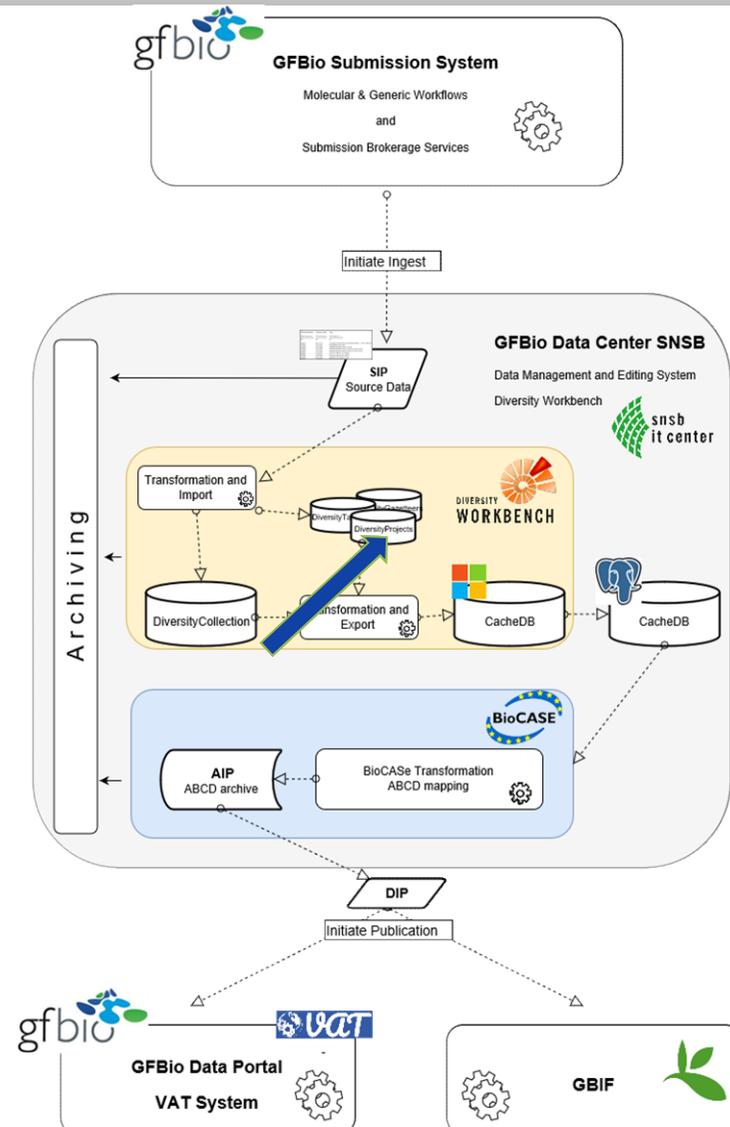
Please select a study-type ...

Data URL
Provide an URL where we can access your sequence data. If you leave this field blank, you can upload your sequence files in the next step (after clicking 'Start Submission').

2. Describe your samples and sequencing procedure

Provide information about your samples and experimental setup. Please Download our empty CSV-template, fill it out and use the upload button below to add it to this submission.

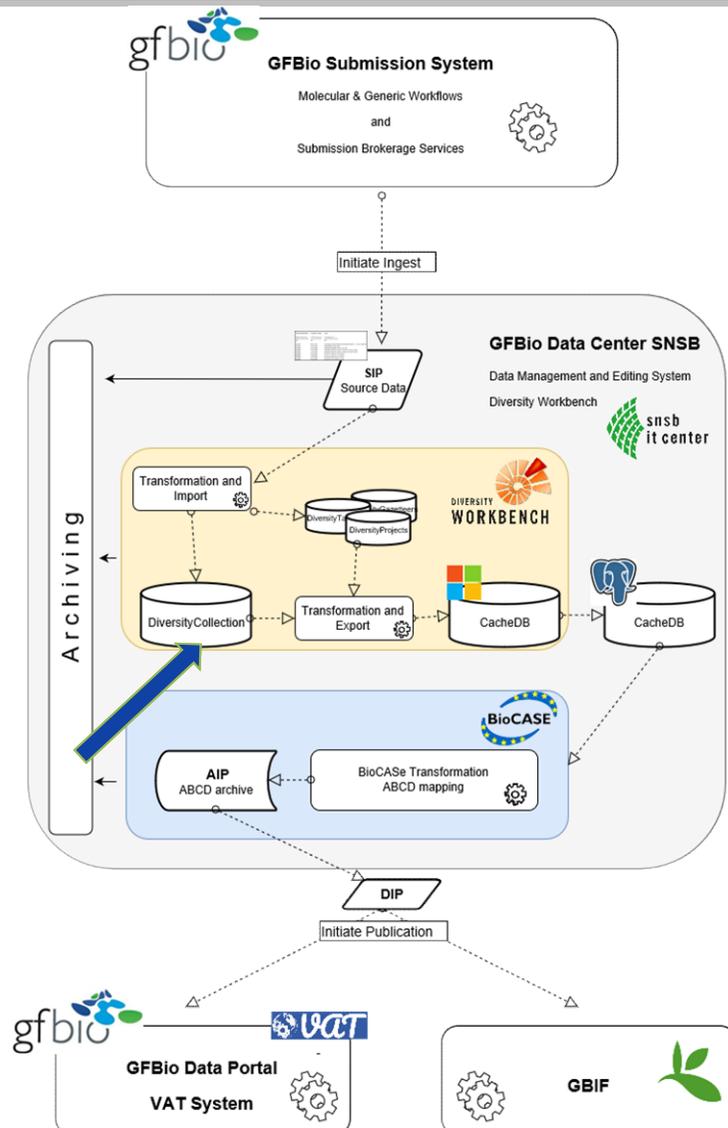
3. Let's go



Datenzentren und Datenpublikation via GFBio

- Datenpublikation über Transformation und Export – CacheDB
- DiversityCollection als zentrales Modul zur Erzeugung eines ABCD-strukturierten DIPs über BioCASE Data-Pipeline

Project Name	Dataset Count	Status	Last Update	Withheld	Version
IBFfungicoll	64 datasets	NOTHING PLANNED	2017-10-05 12:28:43	3 datasets withheld	Version 25
IBFgatticoll	494 datasets	NOTHING PLANNED	2017-10-05 12:58:48	139 datasets withheld	Version 25
IBFlichencoll	164 datasets	NOTHING PLANNED	2017-10-05 12:26:20	0 datasets withheld	Version 25
IBForthopteracoll	36 datasets	NOTHING PLANNED	2017-11-08 18:37:50	0 datasets withheld	Version 25
IBFplantscoll	197399 datasets	NOTHING PLANNED	2017-07-14 15:59:09	962 datasets withheld	Version 25



DiversityCollection (DC)-Daten im GFBio Portal



Search:

Show entries per page

Showing 1 to 10 of 4,632,291 entries

[Previous](#) [Next](#)

- | | |
|---|--|
| <p>Data set: IBF Monitoring of Lichens. Contact: Wolfgang von Brackel</p> <p>Data Center: Data Center SNSB</p> <p>Summary: http://www.diversitymobile.net/wiki/IBFlichenscoll_About, zipped ABCD Archive</p> <p>Dataset Citation: Brackel, W. von (2018). IBF Monitoring of Lichens and Lichenicolous Fungi. [Dataset]. Version: 20180704. Data Publisher: Staatliche Naturwissenschaftliche Sammlungen Bayerns - SNSB IT Center, München. www.diversitymobile.net/wiki/IBFlichenscoll_About.</p> <p>License/Rights: Permission is given for free use of data in the search result for non-commercial purposes. Any commercial use must be granted by prior written agreement.
License: CC BY 4.0</p> <p>Data Download</p> | |
| <p>Data set: The Environmental Sample Collection of Spiders at the Staatliches Museum für Naturkunde Karlsruhe. Contact: Hubert Höfer</p> <p>Data Center: Data Center SNSB</p> <p>Summary: http://www.diversityworkbench.de/DatabaseClients/SMNKspiderstudcoll/About.html, zipped ABCD Archive</p> <p>Dataset Citation: Höfer, H. (2018). The Environmental Sample Collection of Spiders at the Staatliches Museum für Naturkunde Karlsruhe. [Dataset]. Version: 20180704. Data Publisher: Staatliche Naturwissenschaftliche Sammlungen Bayerns - SNSB IT Center, München. http://www.diversityworkbench.de/DatabaseClients/SMNKspiderstudcoll/About.html.</p> <p>License/Rights: Permission is given for free use of data in the search result for non-commercial purposes. Any commercial use must be granted by prior written agreement.
License: CC BY 4.0</p> <p>Data Download</p> | |
| <p>Data set: The Barcoding Fauna Bavarica Project at the Zoologische Staatssammlung München. Contact: Jörg Spelda</p> <p>Data Center: Data Center SNSB</p> <p>Summary: http://www.barcoding-zsm.de/bfb, zipped ABCD Archive</p> <p>Dataset Citation: AG Barcoding Fauna Bavarica (2018). The Barcoding Fauna Bavarica Project at the Zoologische Staatssammlung München. [Dataset]. Version: 20180705. Data Publisher: Staatliche Naturwissenschaftliche Sammlungen Bayerns - SNSB IT Center, München. http://barcoding-zsm.de/bfb.</p> <p>License/Rights: Permission is given for free use of data in the search result for non-commercial purposes. Any commercial use must be granted by prior written agreement.
License: CC BY 4.0</p> | |

DC-Daten im GFBio Portal



Search:



Show entries per page

Showing 1 to 10 of 2,046 entries

[Previous](#) [Next](#)

[Furo microlepidotus \(Agassiz, 1833\), a fossil specimen record of the "The Fossil Fish Collection at the Bayerische Staatssammlung für Paläontologie und Geologie" dataset \[ID: BSPG-AS-005-000011 / 656291 / BSPG-AS-005-000011 b\]](#)

Data Center: Data Center SNSB

Summary: <http://www.snsb.info/DatabaseClients/BSPGpiscescoll/About.html>

Parameters: Multimedia Object; Locality; Date; Latitude; Longitude

Dataset Citation: Moser, M. (2018). The Fossil Fish Collection at the Bayerische Staatssammlung für Paläontologie und Geologie. [Dataset]. Version: 20180704. Data Publisher: Staatliche Naturwissenschaftliche Sammlungen Bayerns – SNSB IT Center, München. <http://www.snsb.info/DatabaseClients/BSPGpiscescoll/About.html>.

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License for associated multimedia objects: CC BY-SA 4.0

[Multimedia Object - Data Description](#)

[Furo microlepidotus \(Agassiz, 1833\), a fossil specimen record of the "The Fossil Fish Collection at the Bayerische Staatssammlung für Paläontologie und Geologie" dataset \[ID: BSPG-AS-005-000011 / 656291 / BSPG-AS-005-000011 a\]](#)

Data Center: Data Center SNSB

Summary: <http://www.snsb.info/DatabaseClients/BSPGpiscescoll/About.html>

Parameters: Multimedia Object; Locality; Date; Latitude; Longitude

Dataset Citation: Moser, M. (2018). The Fossil Fish Collection at the Bayerische Staatssammlung für Paläontologie und Geologie. [Dataset]. Version: 20180704. Data Publisher: Staatliche Naturwissenschaftliche Sammlungen Bayerns – SNSB IT Center, München. <http://www.snsb.info/DatabaseClients/BSPGpiscescoll/About.html>.

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[Multimedia Object - Data Description](#)

[Mene rhombea Volta, a fossil specimen record of the "The Fossil Fish Collection" dataset \[ID: BSPG-AS-001-001201 / 710579 / BSPG-AS-001-001201 b\]](#)

Data Center: Data Center SNSB



DC-Daten im GFBio VAT Tool



<https://www.gfbio.org/data/visualizeandanalyze>



DC-Daten in GBIF und BIB, dynamischer Datenfluss

PUBLISHER | SINCE 4 MAY 2010

Staatliche Naturwissenschaftliche Sammlungen Bayerns

ABOUT | HOME PAGE | 6,488,386 OCCURRENCES | 75 DATASETS | 98 CITATIONS

Description: The Bavarian Natural History Collections (Staatliche Naturwissenschaftliche Sammlungen Bayerns, SNSB) are a public consortium of scientific research institutions, natural history museums and a botanical garden. They are a sub-item of the Bavarian State Ministry of Sciences, Research and the Arts. All these institutions are located in Bavaria and have a wide range of tasks and goals. The data provided by the SNSB are processed by the SNSB IT Center (www.snsb.info). The data ownership is as cited under the single data resources.

Endorsed by: GBIF Germany

Installations: DiversityTaxonNames Server • BioCASE Installation Staatliche Naturwissenschaftliche Sammlungen Bayerns

Administrative contact: Dagmar Triebel

Technical contact: SNSB IT Center

Country or area: Germany

Hosting: 76 datasets (2 publishers • 2 countries)

6,215,783 GEOREFERENCED RECORDS

182,357 OCCUR

Generated 13 hours ago © OpenStreetMap contributors, © OpenMapTiles, GBIF.

Any year 1640 - 2018

EXPLORE

What is GBIF? | API | FAQ | Newsletter | Privacy | Terms and agreements | Citation | Acknowledgements

Contact | GBIF Secretariat Universitetsparken 15 | DK-2100 Copenhagen Ø | Denmark

GBIF Global Biodiversity Information Facility

f t in v i

FLORA VON BAYERN

Botanischer Informationsknoten Bayern

Kontakt, Impressum

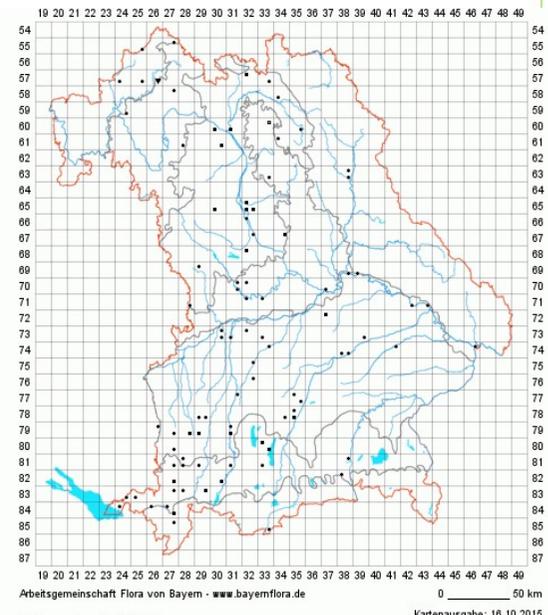
[Wiki:Startseite](#) |
 [Steckbriefe](#) |
 [Checkliste](#) |
 [Rote Liste](#) |
 [Auswertungen](#) |
 [Bibliographie](#)

Botanischer Informationsknoten Bay

Botanischer Informationsknoten Bayern (Erfassung der pflanzlichen Flora und Präsentation der Daten in verschiedenen Kategorien sowie als Steckbriefdarstellung).

Der Botanische Informationsknoten Bayern wird als Projekt der SNSB. Die Geschichte seit 2003 ist eng verbunden mit der Wiki-Plattform 'Bayernflora' (Bayerflora.de), die durch die Kenntnisse um die Datenbanken der SNSB über die Herkunft der publizierten Daten ermöglicht wird.

Für weitere Informationen zum Projekt wenden Sie sich bitte an den Kontakt der SNSB. Die Darstellung von Verteilungsdaten zur BIB ist eine Darstellung von Verteilungsdaten.



Ambrosia artemisiifolia
 Belfußblättriges Traubenkraut

167 Angaben aus 92 Quadranten, davon: 144 Quadranten-Angaben
 0 1/4-Quadranten-Angaben (1/16 MTB)
 23 1/16-Quadranten-Angaben (1/64 MTB)

GFBio: Import in DiversityDescriptions (DD)

- GFBio Submission -> Metadaten-Import in DP
- Daten-Import und Management in DD

1. Describe your Dataset

Title*
Provide a short, descriptive title for your dataset.

Description*
Provide a summary of the work you did to produce the dataset (similar to an article abstract).

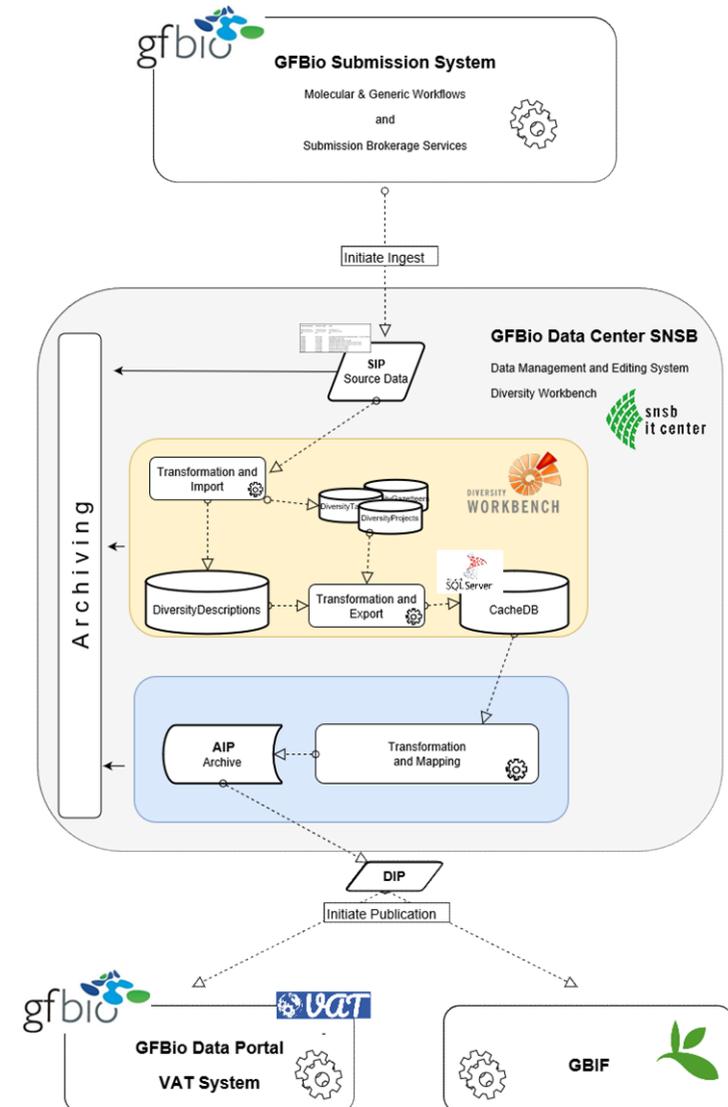
Study Type*
Select the type of sequencing in your dataset. Choose 'Other' if you are not sure.

Data URL
Provide an URL where we can access your sequence data. If you leave this field blank, you can upload your sequence files in the next step (after clicking 'Start Submission').

2. Describe your samples and sequencing procedure

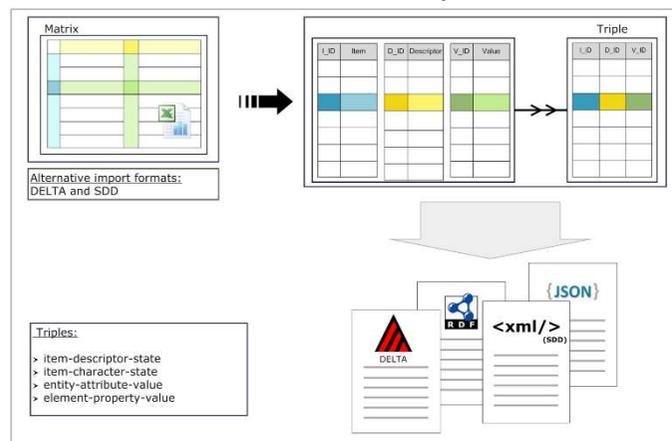
Provide information about your samples and experimental setup. Please Download our empty CSV-template, fill it out and use the upload button below to add it to this submission.

3. Let's go

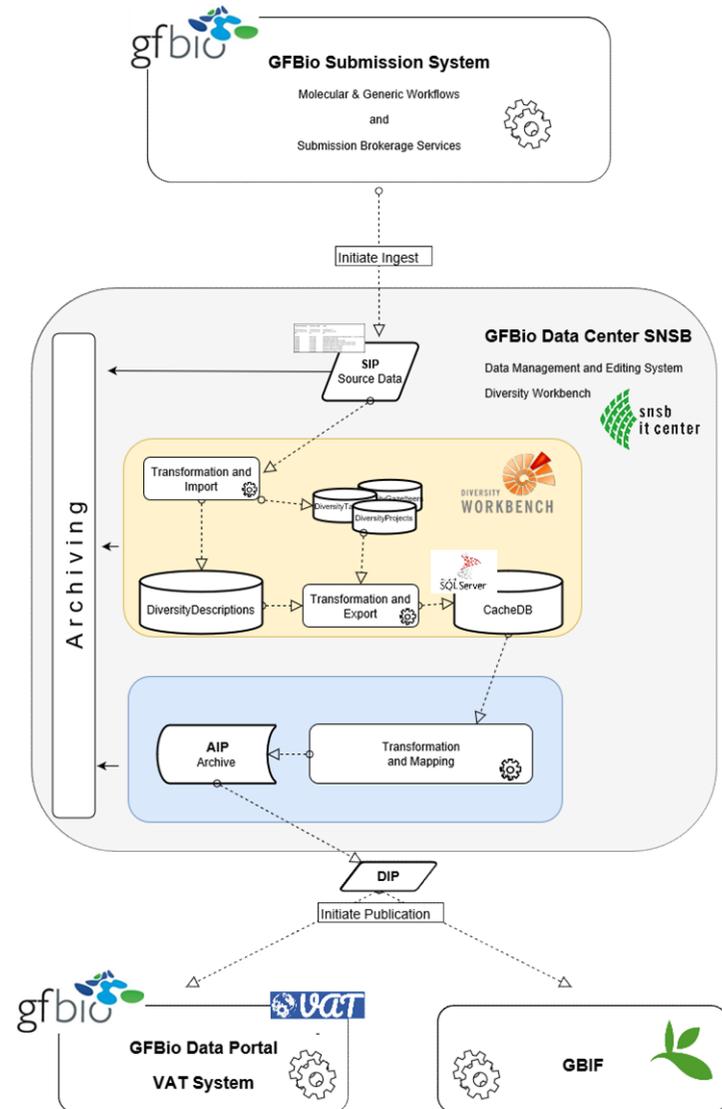


DiversityDescriptions und DD-Daten in GFBio

- Datenmanagement in DD: Daten strukturiert nach item → descriptor → value
- Datenpublikation über Transformation und Export
- DiversityDescriptions als zentrales Modul zur direkten Erzeugung eines EML- oder SDD-strukturierten DIPs
- Zip-Archive mit DD + DP Exporten für GFBio-Portal bzw. zur Submission (in Entwicklung)



DiversityDescriptions – Matrix-based data to triple-structured data



DiversityTaxonNames (DTN)

- Management von taxonomischen Namen, verknüpfter Information
- Management von Synonymen, akzeptierten Namen, Klassifikationen, Typifizierung and Volksnamen
- Erstellung von Taxonreferenzlisten, Checklisten mit z. B. geographischen, naturräumlichen oder Naturschutzkategorien (RL)

The screenshot displays the DiversityTaxonNames (DTN) software interface. The main window shows the taxonomic details for *Biatora sylvana* Korb. The interface is divided into several panels:

- Left Panel:** A list of related taxa, including *Biatora plicata* Fr., *Biatora poetschiana* Korb., *Biatora pontica* Printzen & Tansberg, *Biatora porphyroplaca* Hinteregger & Po., *Biatora porphyrospoda* Anzi, *Biatora propinquata* (Nyl.) Arnold, *Biatora pullata* Norman, *Biatora pyraea* var. *saxicola* Hepp, *Biatora pyrrophthalma* Mont., *Biatora rhododendri* (Hepp) Arnold, *Biatora rhodopis* Tuck., *Biatora rufidula* (Graewe) S. Ekman & P., *Biatora rufofusca* Anzi, *Biatora rugulosa* Hepp, *Biatora scorigena* (Müll. Arg.) Ramb., *Biatora scotopholis* Tuck., *Biatora similis* A. Massal., *Biatora sorendosa* Rambold, *Biatora sphaeroides* (Dicks.) Hornem., *Biatora sphaeroides* (Dicks.) Korb., *Biatora sphaeroidiza* (Vain.) Printzen & I., *Biatora straminea* Stenh., *Biatora subconcolor* Anzi, *Biatora subdiffracta* Arnold, *Biatora subduplex* (Nyl.) Printzen, and *Biatora subduplex* (Nyl.) Räsänen ex.
- Top Panel:** Taxonomic name details for *Biatora sylvana* Korb., including ID (1036334), Version (3), and various authentication fields.
- Center Panel:** Nomenclature and Taxonomic reference / Protologue information, including a table with columns for Volume, Issue, Pages, Details, D. M. Y. of P., and Suppl. The table shows a reference to volume 200, issue 3, pages 182-185, published in 1855.
- Right Panel:** Typification and Synonymy information. The 'Synonymy' section shows that *Biatora sylvana* Korb. is based on *Lecania hyalina* (Fr.) R. Sacc. and is a heterotypic synonym.
- Bottom Panel:** Synonymy overview and external data sources, listing various references for *Lecania hyalina* and *Biatora sylvana*.

Webdienste – DiversityTaxonNames

- Eine Reihe von DTN-Installationen am SNSB IT-Zentrum: intern und auf TNT Server „DWB Cloud“ stellen Inhalte bereit
- Inhalte über Web Services und GUIs bereitgestellt



										n.bailly@cgar.org
About "Taxon list of Pisces and Cyclostoma from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Pisces_DE (927)	Pisces et Cyclostomata	Germany	118	-; +	-	Dr. Matthias Geiger	ZFMK; GBOL	Kottelat & Freyhof (2007)	
About "Taxon list of Reptilia from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Reptilia_DE (925)	Reptilia	Germany	16	-; +	-	Dr. Dennis Rödder	ZFMK; GBOL	Uetz (2012)	

DTN taxon lists - Fungi and Lichens, Fungal-like organisms

List title	List code	Taxonomic or biotic group	Region	Taxon names below genus level (number)	Synonyms (number); Higher classification above subgenus/ genus level (+/-)	Vernacular names - DE (number)	List curator(s)	Organisation(s) and /or project(s) supporting curation activities	Publications
About "Taxon list of fungi and fungal-like organisms from Germany compiled by the DGM"	TaxRef_DGM_Fungi_DE (1140)	Fungi (including lichens, downy mildews and myxomycetes)	Germany	29.680	11.766; +	3.664	Frank Dämmrich	DGM	Index Fungorum online; Kirk et al. (2008); MycoBank online
Taxon list of Pucciniales from Germany compiled in the context of the GBOL project	TaxRef_GBOL_Pucciniales_DE	Pucciniales	Germany				Dr. Markus Scholler	SMNK; GBOL	Kirk et al. (2008); Scholler et al. (2011)
Taxon list of lichenicolous fungi from Germany compiled in the context of the LIAS project	TaxRef_LIAS_LichFungi_DE	Lichen-associated fungi	Germany	826		4	Wolfgang von Brackel, Dr. Dagmar Triebel, Dr. Konstanze Bensch	SNSB-BSM; LIAS	Wirth et al. 2011; LIASNames



Regionalised and Domain-specific Taxon Lists

The DWB REST Webservice for Taxon Lists is part of a Diversity Workbench (DWB) services network. It is delivering basic information on taxon names in use, synonyms, classification and German vernacular names of a number of groups of animals, fungi and plants.

The current focus is on domain-specific lists (checklists, taxon reference lists, red lists) from Germany under active curation by experts on taxonomy or floristics and faunistics. Each regionalised and domain-specific taxon list has its own history and objectives, is managed completely separately and has its own hierarchical classification. The DiversityTaxonNames (DTN) data resources accessed by the REST API may include additional taxon-related data useful, e. g., for regional nature conservation agencies and environmental projects. This information might be mobilised in a next step.

For more information please refer to DTN_Taxon_Lists_Services

Regionalisierte und domän-spezifische Taxonlisten

Der DWB REST Webservice for Taxon Lists ist Teil eines Netzwerkes aus Diversity Workbench (DWB) Diensten. Er liefert Basisinformation zu anerkannten Taxonnamen, Synonymen, Klassifikationen und deutsche Volksnamen für eine Anzahl von Tier-, Pilz- und Pflanzengruppen.

DTN Taxon Lists REST Web Service connected to the GFBio Terminology Server



Regionalised and Domain-specific Taxon Lists

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For more information please refer to [DTN_Taxon_Lists_Services](#)

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CONTENT / EXTERNAL SERVICES

Web services connected to the Terminology Server

The following services have been integrated into the search [API](#):

- The Catalogue of Life: <http://cybertaxonomy.eu/cdmlib/rest-api-name-catalogue.html>
- The Integrated Taxonomic Information System (ITIS): http://www.itis.gov/web_service.html
- The World Register of Marine Species (WoRMS): <http://www.marinespecies.org/aphia.php?p=webservice>
- Fauna Europaea via PESI: <http://www.eu-nomen.eu/pesi/about-pesi>
- The GeoNames geographical database (Geonames): <http://www.geonames.org/export/web-services.html>
- The DWB REST Webservice for Taxon Lists (DTNtaxonlists): <http://services.snsb.info/DTNtaxonlists/rest/v0.1/static/api-doc.html>
- The Prokaryotic Nomenclature Up-to-Date Taxon list (PNU): <http://bacdive.dsmz.de/api/pnu/>



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Imprint

DTN Taxon Listen in GBIF

- derzeit 32 Listen, DOI, Zitat

CHECKLIST DATASET | REGISTERED 23 MARCH 2016

Taxon list of fungi and fungal-like organisms from Germany compiled by the DGfM

Published by [Staatliche Naturwissenschaftliche Sammlungen Bayerns](#)
Frank Dämmrich

DATASET TAXONOMY METRICS DOWNLOAD HOME PAGE 32,676 RECORDS

http://www.diversitymobile.net/wiki/About_'Taxon_list_of_fungi_and_fungal-like_organisms_from_Germany_compiled_by_the_DGfM' **Metadata last modified:** 6 September 2018
Hosted by: Staatliche Naturwissenschaftliche Sammlungen Bayerns
License: CC BY 4.0
[How to cite](#) [DOI](#) 10.15468/gtvmjw

20,910 Accepted names 11,766 Synonyms 98% Overlap with GBIF Backbone 83% Overlap with Catalogue of Life

Description
http://www.diversitymobile.net/wiki/About_'Taxon_list_of_fungi_and_fungal-like_organisms_from_Germany_compiled_by_the_DGfM'

Contacts

Frank Dämmrich Originator	Staatliche Naturwissenschaftliche Sammlungen Bayerns, SNSB IT Center Administrative point of contact it-center@snsb.de http://www.snsb.info
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Citation
Dämmrich F. Taxon list of fungi and fungal-like organisms from Germany compiled by the DGfM. Staatliche Naturwissenschaftliche Sammlungen Bayerns. Checklist dataset <https://doi.org/10.15468/gtvmjw> accessed via GBIF.org on 2018-09-17.

TaxRefListe Gefäßpflanzen Bayerns – DTN

- Taxonomische Inhalte und Checklist-Information über verschiedene Datenpipelines und in verschiedenen Formaten bereitgestellt

Taxonomische Referenzliste der Gefäßpflanzen Bayerns

Sie sind hier: [Taxonbezogene Daten](#) → **Taxonomische Referenzliste der Gefäßpflanzen Bayerns**

Inhaltsverzeichnis [Anzeigen | ◀ ▶]

Herunterladen der Taxonomischen Referenzliste (Stand 2015) als:

-  Excel-Tabelle
-  dbase-Datei (für FlorEin)

→ weitere Möglichkeiten der Nutzung siehe unter Datenpflege und -bereitstellung.

Definition und Ziel der taxonomischen Referenzliste der Gefäßpflanzen Bayerns

Taxon bezeichnet in der Biologie eine als systematische Einheit erkannte Gruppe von Lebewesen und ist gleichbedeutend mit **Sippe**; Taxon/Sippe kann eine Art meinen, aber auch eine Unterart, eine Gattung oder auch jede höhere verwandtschaftliche Einheit, die gerade betrachtet wird. Verschiedene Taxa werden in ihrer Verwandtschaft zueinander klassifiziert. Die **Taxonomie** als ein Teilgebiet der Biologie erfasst die verwandtschaftlichen Beziehungen von Lebewesen in einer Systematik. Taxonomien (und Phylogenie) sind Gegenstand der Forschung. Taxonomische Konzepte und Klassifikationen ändern sich daher laufend.

Um jedoch ein stabiles Arbeitsgerüst für darauf aufbauende Forschungen wie Kartierungsprojekte und Beobachtungen zu Fauna und Flora zu haben, sind globale wie regionale **Taxonomische Standardreferenzlisten** wichtig. Sie bilden frühere und aktuelle **Taxonkonzepte** ab, **Beziehungen von Taxa und Konzepten** zueinander, und übersetzen diese in akzeptierte Konzepte und Namen. Diese Listen werden oft auch als Checklisten bezeichnet und z.T. zusammen mit umfangreichen Kommentaren publiziert (s. LIPPERT & MEIEROTT 2014). Taxonomische Referenzlisten müssen fortgeschrieben werden, um neue taxonomische Konzepte abzubilden oder neu im Gebiet aufgefundene Arten aufzunehmen.

Die **Taxonomische Referenzliste der Gefäßpflanzen Bayerns** leistet den entsprechenden Dienst für die Flora von Bayern. Sie wird nach den Vorstellungen der Pflanzenkenner und Taxonomen in Bayern langfristig gepflegt und stellt das Rückgrat für Kommunikation und jeglichen Datenaustausch dar. Die Kuration der Daten in einer SQL-Datenbank wird derzeit unterstützt durch das Bayerische Landesamt für Umwelt und die Staatlichen Naturwissenschaftlichen Sammlungen Bayerns im Rahmen des Projektes **Flora von Bayern – Datenfluss DWB und FIS Natur**.

Arbeitsplan heute

Arbeitsprogramm

Thema ist das Arbeiten mit DWB Werkzeugen zu **Datentransformation und Datenpublikation**. Die Teilnehmer werden angeleitet, mit den DWB-Applikationen in Trainingsdatenbanken selbständig zu arbeiten.

- 10.00 Uhr [Diversity Workbench – Allgemeine Einführung](#) (D. Triebel)
- 10.30 Einführung in die Diversity Workbench Rich Clients und Konzepte des Datenmanagements (M. Weiss); ([Video 1: DWB Datenbearbeitung – Verknüpfung von Modulen](#); [Video 2: DWB Datenbearbeitung – Webservices](#))
- 11.00 Uhr Kuration von (Meta-)Daten mit **DiversityProjects** (z.B. in Desktop-Installation bei Forschern) mit Upload als CSV im [GFBio Submission Portal](#) für die Archivierung in [GFBio Data Centers](#) (W. Reichert, T. Weibulat)
- 11.30 Uhr DWB BioCASE Datenpipeline für Biodiversitäts- und Sammlungsdaten aus **DiversityCollection** nach GFBio ([Suchportal](#) und [VAT Tool](#)) (T. Weibulat, M. Weiss); ([Video: Übersicht DWB Cachedatenbanken zur Datenpublikation](#))
- 12.30 Uhr Mittagspause
- 13.30 Uhr GIS-gestützte Optimierung und Transformation von Bayernflora-Daten zur Datenpublikation aus **DiversityCollection** im [BIB Portal](#) (M. Ruff, M. Weiss)
- 14.15 Uhr DWB **DiversityDescriptions** Datenpipeline nach GFBio (unter Einbeziehung von Metadaten aus **DiversityProjects**) (A. Link, T. Weibulat)
- 15.00 Uhr Kaffeepause
- 15.30 Uhr Prozessierung von DWB Daten für CETAF Identifiers REST Service an den SNSB (S. Seifert, D. Triebel)
- 16.00 Uhr Transformation von **DiversityTaxonNames** Checklisten zur Publikation via [DTN REST Web Services](#), [GFBio Terminologie-Server](#) und [GBIF](#) (S. Seifert, T. Weibulat)
- 16.20 Uhr Publikation der [Bayerischen TaxRef Liste](#) mit Export als Excel file (W. Diewald, M. Ruff)
- 16.40 Uhr Diskussion
- 17.00 Uhr Ende

DWB Workshop am 18. September 2018



http://www.snsb.info/SNSBInfoOpenWiki/Wiki.jsp?page=DivWorkbenchWorkshop_35