

Annex 6

New Interface for the DaRWIN Collections Management System

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1. INTRODUCTION

The DaRWIN Collection management system is an in-house relational database based on PostgreSQL with a user web interface designed with the Symfony/PHP framework. It was developed first by RBINS and after by the consortium RBINS/RMCA.

DaRWIN
Data Research Warehouse Information Network

ZOOLOGICAL SEARCH GEO/PALEO SEARCH COLLECTIONS TAKE A TOUR CONTACTS

EN | FR | NL | ES

Go to backend Logout

Welcome to the RBINS-collection database

The Royal Belgian Institute of Natural Sciences houses a precious collection of zoological, anthropological, paleontological, mineralogical and geological materials and data. The renowned Iguanodons from Bemissart, ambassadors of the Belgian science institute in Brussels, represent a natural history collection currently estimated to hold over 37 million specimens.

The roots of the present day collection reach far back in history. It evolved from the Natural History collection of Karel of Lotharingen, governor of The Netherlands (1712-1790) and was part of didactic materials owned by the Central School of the City of Brussels. After the independence of Belgium, the City of Brussels donated the collection to the Belgian Government and became part of the autonomous "Royal Natural History Museum" in 1846, known as the "Royal Belgian Institute of Natural Sciences" since 1948. Fieldwork by researchers and collaborators, in Belgium and abroad, donations and purchases have been expanding the assets ever since.

The darwin website (darwin.naturalsciences.be) is the main gate to glimpse the extent and diversity of the collections. Today, the darwin database manages information on about 2.637.600 specimens (940.000 records) stored in the institute's depositories. This number rises on a daily basis thanks to the continued efforts of patrimonium directorate, the curators and their adjuncts that are responsible for maintaining the stored specimens and information. Our online database provides information about the collections of the Vertebrates, Invertebrates, Entomology, Paleontology, Geology and Mineralogy.

Information on the Anthropological collection is maintained on a parallel system: mars (Multimedia Archaeological Research System). This data can be consulted following: www.naturalsciences.be/mars. The Department of Geology and the Department of Marine Ecosystems provide information on different systems. More information on these departments can be found on www.naturalsciences.be/en/science/do/25/scientific-research/research-copogrammes/34 And odnature.naturalsciences.be/home/

The corner stone of the darwin database is the specimen and the information about its origin and its status. Although the status of the specimens follow the current regulations of the [International Code on Zoological Nomenclature](http://www.naturalsciences.be/en/science/do/25/scientific-research/research-copogrammes/34) other status specifications not treated by the ICZN regulations (eg. topotype) have been maintained as supplementary information about the specimen(s) in question.

Enjoy your virtual visit through our collection!

Discover some random specimens :

- [Aves / Emberiza calandria / Linnaeus_1758](#)
- [Pisces / Achanurus apodus \(Gervais_1853\)](#)
- [Hydrozoomedusae / Apolobothemia latecarinata Allman_1877](#)

museum

Recommended browser for DaRWIN :

Figure 1. Home screen of the DarWIN CMS

The Backend user interface is composed of a dashboard which can be configured by the user in order to display the requested widgets in a specific order. These choices are saved in the user preferences independently from the workstation.

The screenshot displays the home screen of the DarWIN CMS backend. At the top, there is a navigation bar with tabs for 'My Preferences', 'Searches', 'Add', 'Administration', and 'Help'. Below this, the main content area is divided into two panels. The left panel, titled 'Statistics', shows 'All types and the record count associated' with 'All objects in DarWIN' having a total of 3076090. It also includes a 'My saved specimens' section with one item, 'test export', and a 'Manage' button. The right panel, titled 'My saved searches', lists 25 search queries, each with a star icon, a search icon, and a delete icon. The queries include 'oceans vertebrates 2020-02-19b', 'socolra', 'general search', 'amphibians types in amphibians', 'Vertebrates Oceans 02-2020-def', 'Vertebrates Africa 02-2020', 'philippines type specimens', 'Vertebrates North America 02-2020', 'philippines types', 'Socolra', 'Vertebrates europe 02-2020', 'vertebrates Asia tropical 02-2020', 'Vertebrates south America 02-2020', 'Scolopax rusticola 2020', 'Vertebrates Australasia 02-2020', 'vertebrates temperate asia 02-2020', 'pacific islands VZ 03-2020', 'Vertebrates antarctica', 'cervus elaphus', 'dama dama', 'bovidae africa 2020', 'Brabant entomology', and 'records Belgium'. A 'Manage' button is located at the bottom right of this panel.

Figure 2. Home screen of the backend of the DarWIN CMS

The screenshot shows the settings page for the widgets displayed by the DarWIN CMS. The top navigation bar is identical to Figure 2. Below the navigation bar, there are four main sections: 'Add new specimen' (with sub-links 'Add new taxon' and 'My Last Actions'), 'My activity' (with sub-links 'My loans' and 'My saved searches'), 'My saved specimens' (with a 'News' link), and 'Statistics' (with a 'Workflows summary' link). Below these sections, there is a 'My saved specimens' widget preview showing one item, 'test export', and a 'Manage' button. To the right, there is a list of 25 saved searches, identical to the list in Figure 2, each with a star icon, a search icon, and a delete icon. A 'Manage' button is located at the bottom right of this list.

Figure 3. Settings of the widgets displayed by the DarWIN CMS

And by a set of views accessible by a multi-level menu and allowing the search, the creation and the edition of all information related to a collection specimen (Specimen, Taxonomy, Institution, People, Sampling Location etc ...)

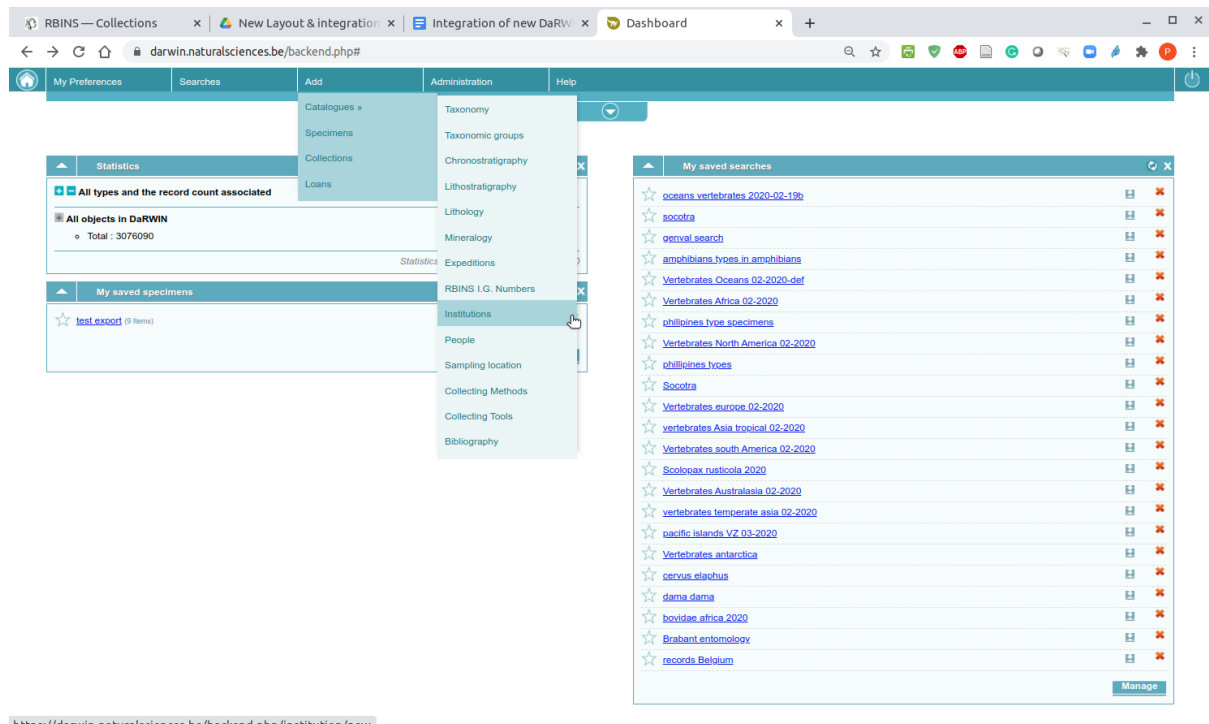


Figure 4. Menus and sub-menus of the backend of the DaRWIn CMS

This interface has been in production for nearly 10 years but the capacity of encoding is limited to 5000-10000 specimens/encoder/year. This is a limiting factor if we consider the size of the Belgian Natural History Collections (38 millions for RBINS and 10 millions for RMCA).

Moreover the modification of the interface in Symfony is very time consuming, limiting the optimisation of the interface. We analysed deeply the original DaRWIn interface and proposed several modifications in order to speedup and improve the manual encoding. The time for a complete renewal of the interface using the Symfony technology was estimated to be 24 PM which was/is quite impossible in the present day budgetary context.

2. METHODOLOGY

The NaturalHeritage project aims to develop a set of technologies allowing to combine together several tools but transparently for the final user. We develop a new DaRWIn interface with simple technologies (html) and an easy integration in any institutional website of the Institution or directly in the NaturalHeritage Portal.

In this case study, we used the Plone 4.3 Content management system already in production at RBINS and used it for the NaturalHeritage website to develop the new DaRWIn interface. By this way, a specific encoding interface can be easily developed for each NaturalHeritage partner.

The different views of DaRWIn were slightly modified to be embedded in html pages. A simple html edition allows to call and visualise the DaRWIn views and to access the database's functionalities.

NATURALHERITAGE.BE

You are here: Home / DaRWIn / RBINS

Dashboard
Click on ? to access to contextual help.

Statistics

All types and the record count associated

All objects in DaRWIn
Total : 3054966

Statistics generated at 10/09/2020 - 12:00

My saved specimens

test export (9 Items)

My saved searches

- oceans vertebrates 2020-02-19b
- socotra
- genval search
- amphibians types in amphibians
- Vertebrates Oceans 02-2020-def
- Vertebrates Africa 02-2020
- philippines type specimens
- Vertebrates North America 02-2020
- philippines types
- Socotra
- Vertebrates europe 02-2020
- vertebrates Asia tropical 02-2020

Search Site Search

only in current section

Search

Zoology Paleontology

Administration

Institution People
Collection Inventory
Expedition Nagaya ABS

Item

Specimen Taxonomy
Mineralogy Lithology

Sampling

Location Chronostratigraphy
Tools Methods

Multimedia

Picture Sound
3D Sketchfab LTP

Bibliography

DaRWIn

Reporting

Collections statistics
Reports
Pinned Specimens
Saved search
Big Brother (admin only)

Loans & Labels

Loans
Labels

Import & Mass action(s)

Taxonomy
Geonames
Specimens
Mass Action(s)
Testing import

Figure 5. Home screen of the backend of the RBINS DarWIN CMS

3. INFRASTRUCTURE

The case study is based on the Plone 4.3 CMS already in use at RBINS. There is no need for a new infrastructure and this approach can be transferred to any other Content Management System used to build Institution websites.

4. RESULTS

4.1 Simplification of the menu

We create several one click menus allowing us to directly access the different sections from the Dashboard view. This limits drastically the number of clicks (20%) and speeds up the encoding process.

The right side menu provides links to the database items menus: Administration, Item, Sampling, Multimedia, Bibliography, etc

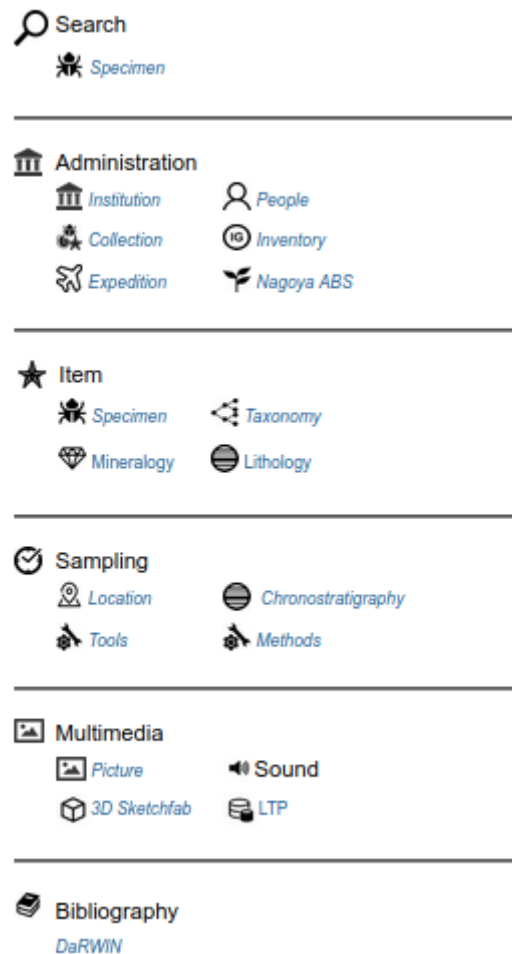


Figure 6. Menu to access the different content modules of the DarWIN CMS

while the bottom menu provides links to the management tools: Settings, Reporting, Loans and labels, Import and Mass actions.

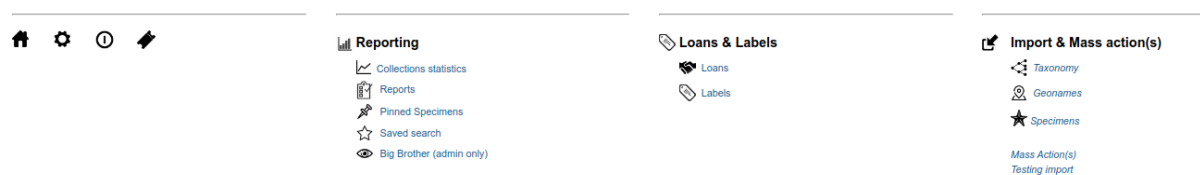


Figure 7. Menu to access the different management/administrative modules of the DarWIN CMS

Each link can redirect to a specific section which can be easily adapted if the tools used are different from one institution to another one.

The idea is also to avoid/limit the double encoding: the encoder is always invited to check first if the item doesn't exist in the database before being able to create it. This is very important for the standardisation and the validation of the data.

The screenshot shows the top navigation bar with the logo 'NATURALHERITAGE.BE' and several icons. Below the logo, the breadcrumb 'You are here: Home / DaRWIN / RBINS / Institution' is visible. The main heading is 'Institution', followed by a search bar labeled 'Search Institution' with a magnifying glass icon and a help icon. Below this is the 'Institution Search' section, which contains a text input field for 'Institution Name' and a 'Search' button. On the right side, there is a 'Search Site' input field with a 'Search' button and a checkbox for 'only in current section'. Below this, there are icons for a home page and a search icon. At the bottom right, there are links for 'Collections Catalogues', 'iDigBio (USA)', and 'CETAF (Europe)'.

Figure 8. Search view for institution

The screenshot shows the top navigation bar with the logo 'NATURALHERITAGE.BE' and several icons. Below the logo, the breadcrumb 'You are here: Home / DaRWIN / RBINS / Institution' is visible. The main heading is 'Institution', followed by a note: 'Before adding a new institution check first if it exists already in the database'. Below this is a button labeled 'Add Institution' with a magnifying glass icon and a help icon. Below this is the 'New Institution' section, which contains a form with the following fields: 'Name' (text input), 'Abbreviation' (text input), and 'Type' (dropdown menu with an 'Add another type' link below it). There are 'Cancel' and 'Save' buttons at the bottom of the form. On the right side, there is a 'Search Site' input field with a 'Search' button and a checkbox for 'only in current section'. Below this, there are icons for a home page and a search icon. At the bottom right, there are links for 'iDigBio (USA)' and 'CETAF (Europe)'.

Figure 9. Input interface for a new institution

The menu on the right side provides links to external tools or authority validated resources to improve the quality of the encoding and limit the time to reach it. This uses only html encoding limiting the time needed to add a new resource or to modify an existing one.

The following section will describe in more detail the different sections available in the new interface.

4.2 Search specimen



Figure 10. Menu to search a specimen at the upper right corner of the backend view

4.2.1 Backend Search

The **backend search** allows registered users to search specimens from Zoological, Paleontological / Geological collections.

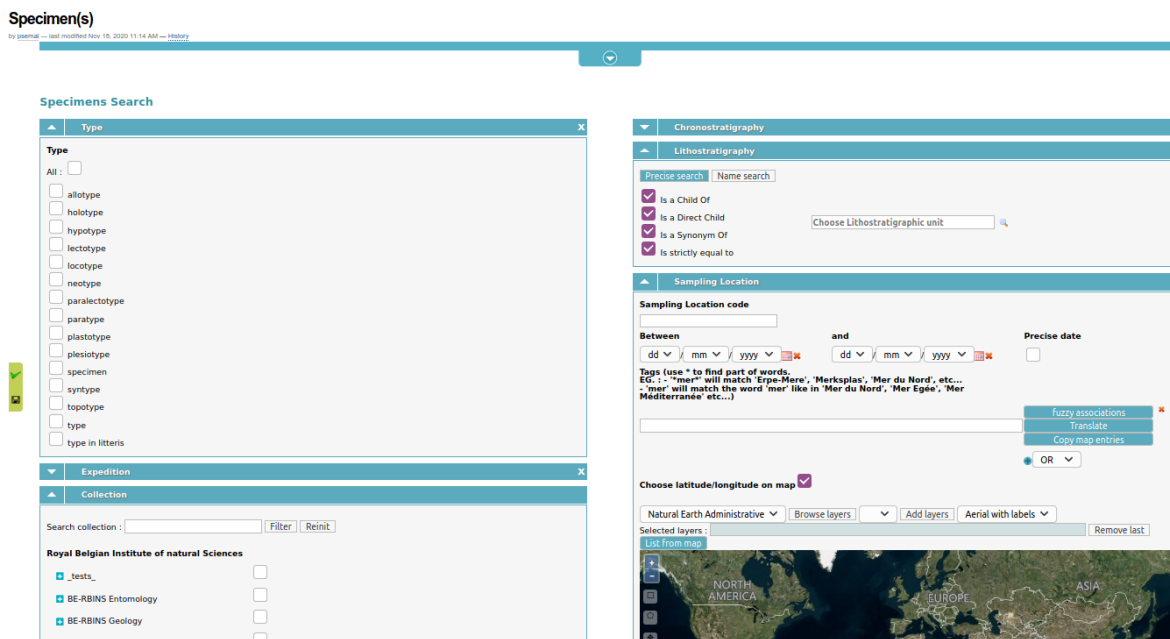


Figure 11. Backend Specimen search view

For the Specimens search, different criteria can be used and the allowed widgets can be defined by the user using the top blue menu.

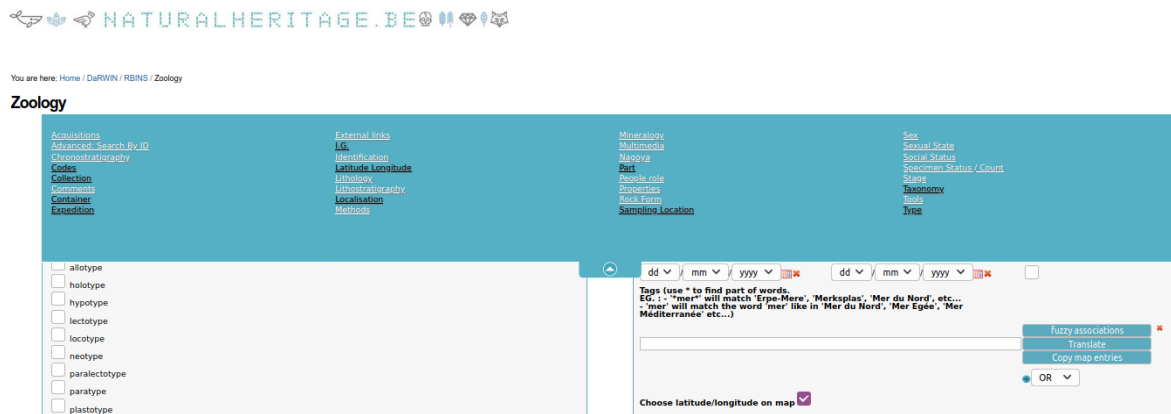


Figure 12. Setting of the widgets displayed on the search interface

4.2.2 Public Search (only published data)

The **public search** with less searching criteria and less customizable interface is available through the NaturalHeritage search interface. This interface also provides a common search with the other NaturalHeritage partners.

See also: annexe 10 - BBR/175/A3 NaturalHeritage: The (re)Indexing System and Research portal

The default search is a Google Like search using one generic research field :

Simple Search

by [psemal](#) — last modified Sep 25, 2019 01:46 PM — [History](#)

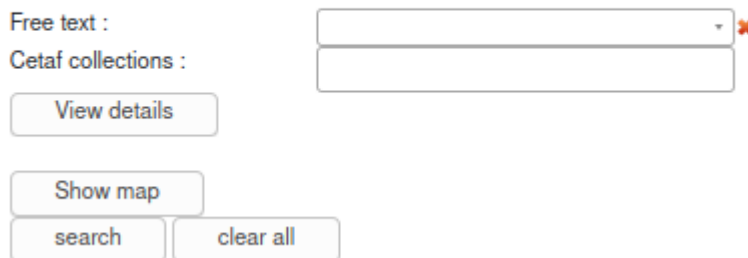


Figure 13. Simple search interface of the NaturalHeritage portal

It is also possible to ask simple human questions: What, Where, When, Who and How or to use a graphical geographic research interface.

Advanced Search

Free text :

Cetaf collections :

Institution:

And:

Collection:

And:

What:

And:

Where:

And:

Who:

And:

When (begin date):

Date type:

When (end date):

Date type:

Geographic Search

Free text :

Cetaf collections :

Natural Earth Administrative

Selected layers :

Polygon on map :

WFS on map :




Figure 14. Advanced search interface of the NaturalHeritage portal

4.3. Administration

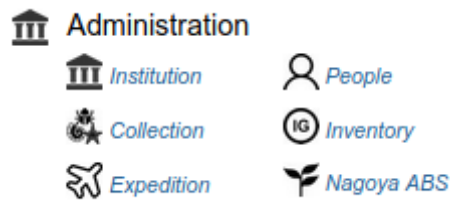


Figure 15. Administration data menu

4.3.1 Institution

This view allows searching if a specific institution exists in the database.

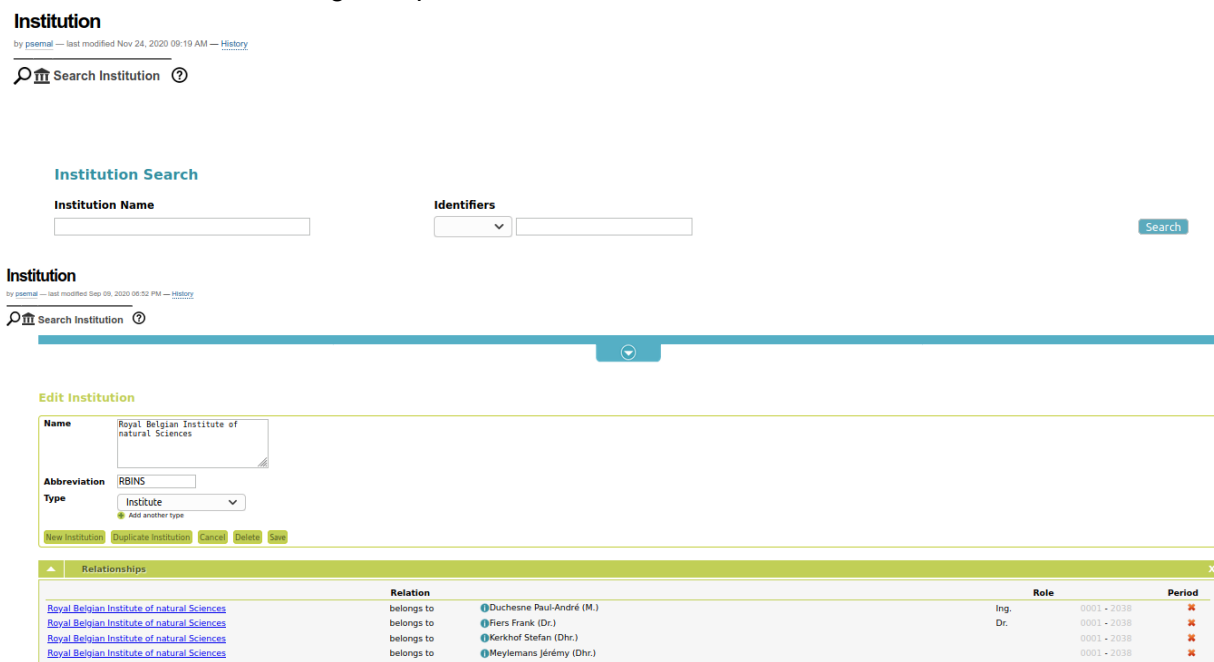
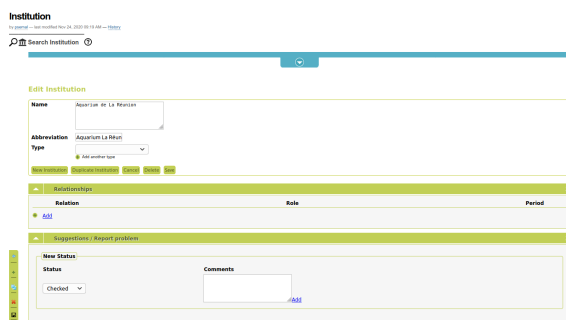


Figure 16. Institution search interface

Leave all fields empty and click on the Search button to see all the existing institutions.



If the Institution exists, the user can use it in the other encoding operations or edit the institution to update information.

Figure 17. Institution view



If the Institution does not exist, the user can add a new institution using the Add menu. He can also open authorities resources like iDigBio, CETAF, GRID, WIKI DATA to gather the updated information. This menu can be easily updated if new service providers appear.

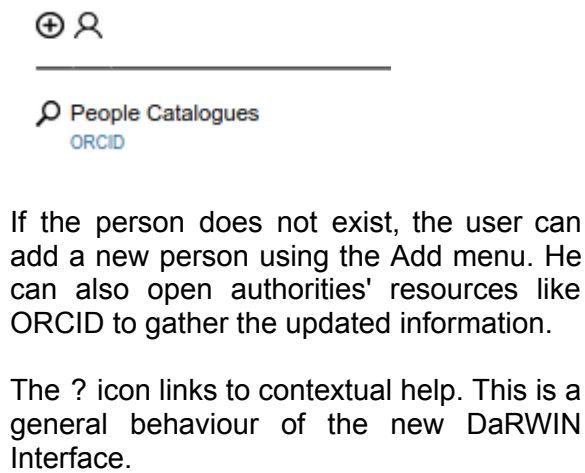
Figure 18. External resources menu

4.3.2 People

This section allows searching if a specific person already exists in the database. If the People exists, the user can use it in the other encoding operations or edit the People to update information.

Figure 19. Institution search interface

Leave all fields empty and click on the Search button to see all the existing people.



People help

by psemal — last modified Sep 09, 2020 06:52 PM

🔍 Search People

- Allow to search on Name, Type (function, ex.: collector, donator) or Activity date (especially useful if you search for all people active at certain period).
- Search results are presented as a table
- Every record can be viewed (👁️), edited (✎️) or duplicated (📄) by clicking on respective icon.

⊕ 👤 Add people

- If person does not exist in the database use "New" button to add a new name.
- It will open "New People" screen in a new tab.
- Fill in all required fields and save it.
- Additional fields will appear after saving allowing to add more information on language, affiliation, addresses or attach a file (ex.: photo).
- Close the windows and return to the People page

Figure 20. Contextual help

4.3.3 Collection

Collection

by psemal — last modified Sep 09, 2020 06:52 PM — History

🔍 📁 Search collection ?

Collection List

Search collection :

Royal Belgian Institute of natural Sciences

- 📁 _tests_ 🔍
- 📁 BE-RBINS Entomology 🔍
- 📁 BE-RBINS Geology 🔍
- 📁 BE-RBINS Invertebrates 🔍
- 📁 BE-RBINS Paleontology 🔍
- 📁 BE-RBINS Vertebrates 🔍
- 📁 Chlorophyta 🔍
- 📁 Research collections 🔍

Figure 21. Collection Search Interface

This section allows searching a collection in the database.

If this exists, specimens can be added manually or imported with templates. The user can also edit the Collection to update the information.



If the collection does not exist, the user can add a collection using the Add menu.

Collection

by psernal — last modified Sep 09, 2020 06:52 PM — [History](#)

Add a collection

New Collection

| | |
|---------------------------|--|
| Public collection | <input checked="" type="checkbox"/> |
| Code | <input type="text"/> |
| Unique identifier | <input type="text"/> |
| Name | <input type="text"/> |
| Institution | <input type="text" value="Choose Institution"/> |
| Collection type | <input type="text" value="mix"/> |
| Conservator | <input type="text" value="Choose Manager"/> |
| Staff Member | <input type="text" value="Choose Staff Member"/> |
| Parent collection | <input type="text" value=""/> |
| Preferred taxonomy | <input type="text" value="All"/> |
| Allow duplicates | <input type="checkbox"/> |
| Nagoya | <input type="text" value="Not defined"/> |

| Users | Rights |
|-------|--------|
| | |

Figure 22. Collection Add Interface

4.3.4 Inventory

This section allows searching an Inventory number in the database.

Inventory
by psemal — last modified Sep 09, 2020 06:52 PM — [History](#)

🔍 Search Inventory I.G. ?

General Inventory Numbers Search Get tab-delimited

I.G.

Between **and**

People

Collector
 Donator or seller
 Identifier

Figure 23. General Inventory Search Interface

Leave all fields empty and click on the Search button to see all the existing references. If this exists, specimens can be related to this inventory reference manually or imported with templates. The user can also edit the Inventory number to update the information.

Inventory
by psemal — last modified Sep 09, 2020 06:52 PM — [History](#)

🔍 Search Inventory I.G. ?

Edit I.G.

I.G. number:

I.G. creation date:

| Insurances | | | | |
|------------------------------------|-----------|---------|---------|-------------------|
| Value | Date from | Date to | Insurer | Person of contact |
| <input type="button" value="Add"/> | | | | |

| Comments | |
|------------------------------------|---|
| Notion | Comment |
| ig_definition | 1 Testudo graeca Loc.: Maroc en 2000 Réc.: Didier Vangeluwe Don - Didier Vangeluwe |
| <input type="button" value="Add"/> | |

| External Links | |
|------------------------------------|---------|
| Link | Comment |
| <input type="button" value="Add"/> | |

| Related Files | | | | |
|---|-------------|------|--------|------------|
| Name | Description | File | Format | Created At |
| <input type="button" value="Add File"/> | | | | |

Figure 24. General Inventory Edit Interface



If the inventory reference does not exist, the user can add it using the Add menu.

I.G. on Collections

Expedition on DarWIN

Add Inventory

by psemal — last modified Sep 09, 2020 06:55 PM — [History](#)

Before adding a new inventory number check first if it exists already in the database

+ Add Inventory ?

New I.G. number

I.G. number:

I.G. creation date:



Figure 25. General Inventory Add Interface

4.3.5 Expedition

This section allows searching an Expedition in the database.

Expedition

by psemal — last modified Sep 09, 2020 06:52 PM — [History](#)

Search Expedition ?

Expedition Search

Get tab-delimited

Name

Between

and

I.G.

Figure 26. Expedition Search Interface

Leave all fields empty and click on the Search button to see all the existing references. If the Inventory reference exists, the user can edit the reference to update the information.

Expedition

by psemal — last modified Sep 09, 2020 06:52 PM — [History](#)

Search Expedition

Edit Expedition

Name: 10

Expedition from date: dd / mm / yyyy

Expedition to date: dd / mm / yyyy

Members: Add Member

New Expedition Duplicate Expedition Cancel Delete Save

Comments: Add

External Links: Add

Related Files: Add File

| Name | Description | File | Format | Created At |
|------|-------------|------|--------|------------|
|------|-------------|------|--------|------------|

Figure 27. Expedition Edit Interface



If the expedition does not exist, the user can add it using the Add menu.



Figure 28. Add expedition Menu

Expedition

by psemal — last modified Sep 09, 2020 06:55 PM — [History](#)

Before adding a new expedition check first if it exists already in the database

[+](#) [Add Expedition](#) [?](#)

New Expedition

Name

Expedition from date dd ▾ / mm ▾ / yyyy ▾ [📅](#) [✖](#)

Expedition to date dd ▾ / mm ▾ / yyyy ▾ [📅](#) [✖](#)

Members

[Add Member](#)

[Cancel](#) [Save](#)

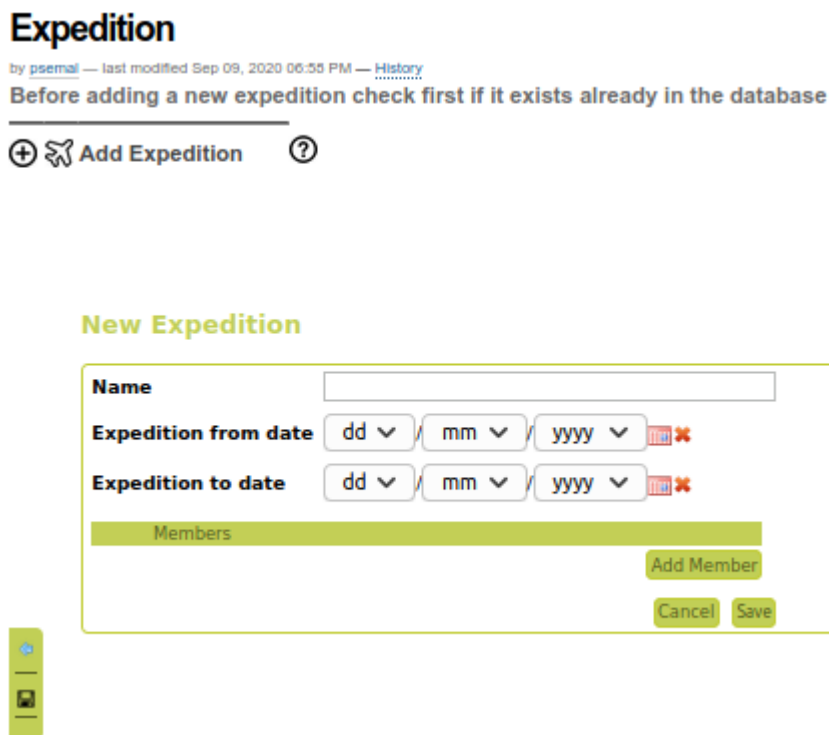


Figure 29. Expedition Search Interface

4.3.6 Nagoya Protocol

This section is related to the management of the Nagoya Documents. The Nagoya Documents can be directly related in Darwin to a specimen, an expedition or an inventory as a related file.

Nevertheless, it is not so, easy because:

- they are several documents for a complete reference to Nagoya documentation (MAT, PIC, CETAF MTA, etc)
- several specimens can be related to the same Nagoya documents which should be uploaded on the system several times for each specimen
- One expedition could be related to several Nagoya Documents
- One inventory could be related to several Nagoya Documents or one Nagoya document could be related to several Inventory numbers

The situation can be very complex to document correctly the DaRWIN items.

In order to have a centralized authority for the Nagoya documentation, we created a specific site : nagoya.naturalheritage.be

See also the annexe 5 - BBR/175/A3 NaturalHeritage: The ABS and CITES modules

What applied to your specimen(s) ?

by admin — last modified Nov 25, 2020 08:08 PM — [History](#)

Please check what is the category concerned by your specimen(s)

| Case 1 | Case 2 | Case 3 |
|---|--|---|
| <ul style="list-style-type: none"> No DNA Not covered by NP (e.g. human remains) Collected prior to Dec. 29 1993 or Collected in international waters or Antarctica or Check for the following cases: <ul style="list-style-type: none"> Country where collected is non-party of CBD (e.g. USA, see List of parties) or Country is a party of CBD and to NP, but provides free access to their genetic resources (e.g. United-Kingdom) | <p>Check https://absch.cbd.int for:</p> <ul style="list-style-type: none"> Country is a party of CBD but not NP (e.g. Canada, New-Zealand) (List of countries) or Country is a party of CBD and party to NP, but (had) not yet passed access regulations or legislation (List of countries) or Country is a party of CBD and to NP and does not provide free access but sample was collected before October 12, 2014 or before the NP went into force in that country | <p>Check for:</p> <ul style="list-style-type: none"> Country is a party of CBD and to NP and does not provide free access and sample was collected after the NP went into force in that country (List of countries) |
| Please provide | Please provide | Please provide |
| 1. <i>Basic information</i> | 1. <i>Basic information</i> 2. <i>Additional Information</i> 3. <i>Documentation (recommended)</i> | 1. <i>Basic information</i> 2. <i>Additional Information</i> 3. <i>Documentation</i> |
| 1. Basic information | 2. Additional Information | 3. Documentation |
| <ul style="list-style-type: none"> Country and exact location where genetic resource was collected Date of collection Any permits/documentation linked to the specimen (?) | <ul style="list-style-type: none"> Name of the national competent authority that granted access. | <ul style="list-style-type: none"> Ⓢ Prior Informed Consent (PIC) and/or Ⓢ Mutally Agreed terms (MAT) and Material Transfert Agreement (MTA) if required by the provider country Link to International recognised certificate of Compliance. Check https://absch.cbd.int for this if available. |

Figure 30. ABS documents main menu

This site offers a path to understand if Nagoya is applicable or not to the specimen(s) and provides a place to store the different Nagoya documentation in chronological folders.

The link(s) to the folder(s) can then be encoded as external links (with Nagoya tag) in the DaRWIN system. The url with the complete path “https://nagoya.naturalheritage.be/year/nagoya_documents_folder_name” has to be used in order to be compliant with the SSL connection.

Figure 31. ABS documents external link in DaRWIN CMS

This link can be filled at the specimen(s) level, at the inventory or the expedition level with all the multiple links options but doesn't request a multiple upload.

4.4. Item



Figure 32. Items menu

4.4.1 Specimen

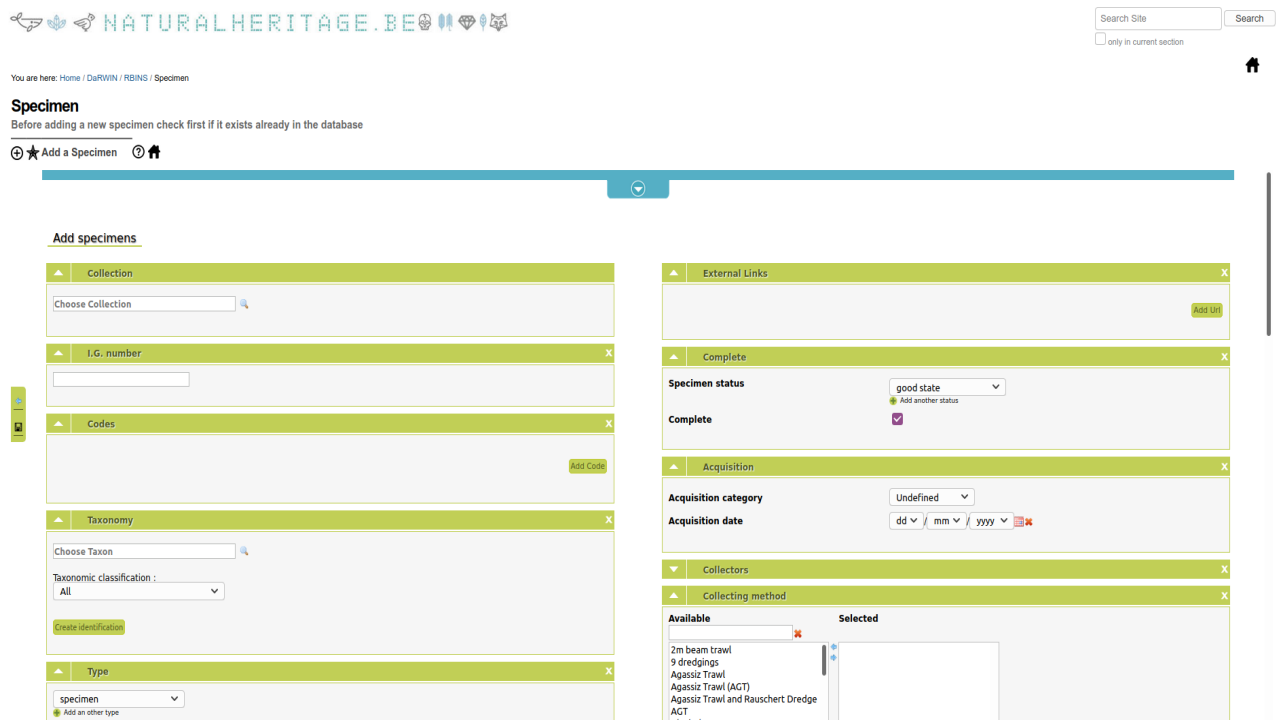


Figure 33. Add specimen interface

The specimen section is the central core of the DaRWIn Collection management system. It summarises all the information of the specimen(s) available using the *ad hoc* widget. The selection of the visible widget is available in the blue top menu



Figure 34. Settings of the widgets related to Specimen

A menu linking to the external resources is available on the right of the encoding windows.



Figure 35. external resources menu

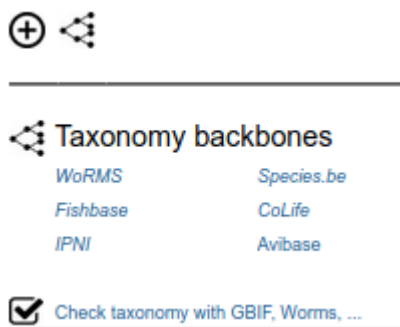
4.4.2 Taxonomy

The taxonomy section is another fundamental block of the DaRWIN CMS. The user should first check if the taxon already exists in the database.



Figure 36. Taxonomic unit search interface

Leave all fields empty and click on the Search button to see existing references.



If the taxon doesn't exist, the user can add a new taxon using the add link.

External resources are also proposed to help the taxonomy check.

Figure 37. Taxonomic unit menu and external resources

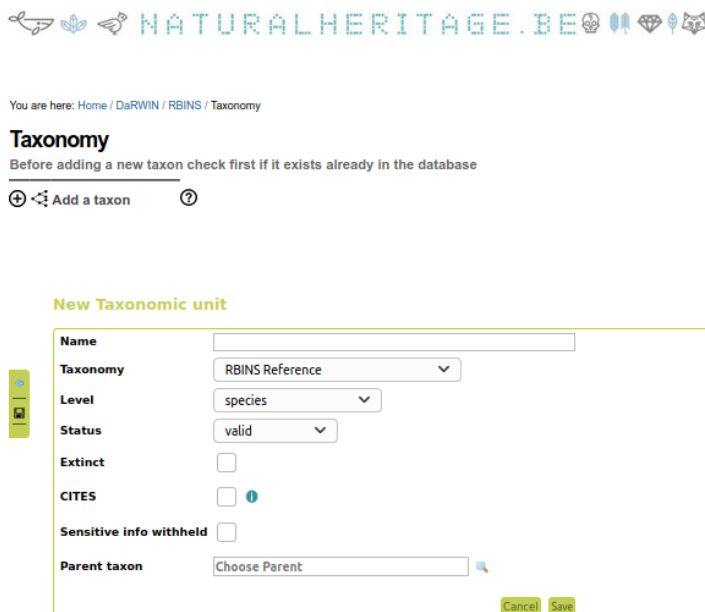


Figure 38. Taxonomic unit add interface

It is possible to work with the validated central taxonomy (RBINS reference) or to create a personal taxonomy. In this case the taxa included in this taxonomy will not be proposed by the RBINS reference.

You can also import Taxonomy using the Import taxonomy widget. The link is on the bottom menu.

The screenshot displays the NaturalHeritage.BE website interface. At the top, there is a navigation bar with the site logo and a search bar. Below the navigation bar, the breadcrumb trail reads "You are here: Home / DaRWIN / RBINS / Taxonomy". The main heading is "Taxonomy", and a link for "Import Taxonomy" is visible. The "Import Taxonomy" form is highlighted with a green border and contains the following fields:

- Source database :** [Empty text input field]
- File :** [File upload button]
- Format :** Taxonomy (dropdown menu)
- Match invalid Units :** Radio buttons for "No" and "Yes" (with "Yes" selected)
- Specimen taxonomy ref :** Hybrids (dropdown menu)
- Taxonomy kingdom :** Animalia (RBINS Reference) (dropdown menu)

A "Submit" button is located at the bottom right of the form. To the right of the form, there is a "Taxonomy backbones" section with links to WoRMS, Species.be, Fishbase, CoLif, IPNI, and Avibase. A checkbox labeled "Check taxonomy with GBIF, Worms, ..." is checked.


Figure 39. Taxonomic unit import interface

4.4.3 Mineralogy

This section proposes the Mineralogic taxonomy using the Strunz or the Dana references systems.

Mineralogy

by psemal — last modified Nov 24, 2020 09:19 AM — History

 [Search Mineralogic unit](#) 

Mineralogic unit Search

Use the character ^ for a "Start with" search (eg: ^falco)

<< [1] :: 2 :: 3 :: 4 :: 5 >> 1 / 124 go

Your query retrieved 6183 records Records per page: 50









| Colour | Code | Name | Level |
|---|--------------|------------------------------|---------|
|  | IX/A.02-60 | Abelsonite | variety |
|  | VIII/E.17-05 | Abenakiite-(Ce) | variety |
|  | VII/E.02-150 | Abemathyite | variety |
|  | III/D.05-10 | Abhurite | variety |
|  | VIII/B.09-05 | Abswurmbackite | variety |
|  | II/B.05-10 | Acanthite | variety |
|  | IX/D.01-20 | Acetamide | variety |
|  | II/B.05 | Achantite - Empresite series | series |

Figure 40. Mineralogy search interface

Leave all fields empty and click on the Search button to see existing references.



 **Ressources**
mindat.org

If the Mineralogic unit doesn't exist, the user can add a new one using the add link.

External resources are also proposed to help the Mineral "taxonomy" check.

Figure 41. Mineralogy menu and external resource

4.4.4 Lithology

This section proposes the Lithology “taxonomy”.

Lithology

by psemal — last modified Nov 24, 2020 09:19 AM — History

Search Lithology ?

Lithologic unit Search

Use the character ^ for a "Start with" search (eg: ^falco)

Name Level All ▼

Search

« < [1] :: 2 :: 3 :: 4 :: 5 > » 1 / 17 go

Your query retrieved 813 records Records per page: 50

| Colour | Name | Level |
|--------------------------|----------------------------|------------|
| <input type="checkbox"/> | Achondrite | category |
| <input type="checkbox"/> | Adinol | rock |
| <input type="checkbox"/> | Aegirin-Trachyte | rock |
| <input type="checkbox"/> | Aktinolith | main group |
| <input type="checkbox"/> | Almiscado | rock |
| <input type="checkbox"/> | Alnöit | rock |
| <input type="checkbox"/> | Alta Quartzite | rock |
| <input type="checkbox"/> | Alum | rock |
| <input type="checkbox"/> | Alva | rock |
| <input type="checkbox"/> | Amarello | rock |
| <input type="checkbox"/> | Ampelite | rock |
| <input type="checkbox"/> | Amphibolite | rock |
| <input type="checkbox"/> | Amphibolith | group |
| <input type="checkbox"/> | Anamesit | rock |
| <input type="checkbox"/> | Anarzit | rock |
| <input type="checkbox"/> | Ancan Rosal | rock |
| <input type="checkbox"/> | Andalusit-Glimmer-Hörnfels | rock |
| <input type="checkbox"/> | Andalusitglimmerschiefer | rock |

Figure 42. Lithology search interface

Leave all fields empty and click on the Search button to see existing references.



If the Lithology unit doesn't exist, the user can add a new one using the add link.

Figure 43. Lithology menu

Lithology

by psemal — last modified Nov 24, 2020 09:19 AM — History

Before adding a new lithology unit check first if it exists already in the database

[+](#) [-](#) Add Lithology [?](#)

New Lithologic unit

Name

Local unit ?

Level ▼

Status valid ▼

Parent Choose Parent [?](#)

Colour #ededede

Cancel Save

Figure 43. Lithology Add interface

4.5. Sampling



Figure 44. Sampling menu

4.5.1 Location

Location

Search a Location

Sampling location search

Code **Between** dd / mm / yyyy **and** dd / mm / yyyy

Tags

Ig number Expedition Technical ID

Collection ref

All:

Show Result as map

Show accuracy of each point

Figure 45. Location Search Interface

Leave all fields empty and click on the Search button to see existing references.



[BoundingBox](#)
[Geonames](#)
[Nominatim](#)
[Google map](#)
[Bing](#)

If the location unit doesn't exist, the user can add a new one using the add link.

External resources are also proposed to help the Location check and creation.

Figure 46. Location menu

Geonames and Nominatim provide Longitude and Latitude for locations searched by their name(s).

New Sampling Location

Code

Nagoya Not defined

Administrative area

country International Name

province International Name

Hydrographic

sea International Name

Populated Places

populated place International Name

Localisation

Coordinates source
Decimal

Latitude **Longitude** **Accuracy** m

Elevation **Accuracy** m






Figure 47. Location Add Interface

4.5.2 Stratigraphy

This section describes the chronostratigraphic context of a specimen. This is used for the palaeontological specimens and for some of the geological specimens.

Chronostratigraphy

 Search Chronostratigraphy 

Chronostratigraphic unit Search

Use the character ^ for a "Start with" search (eg: ^falco)

Name Level Low. bound (My) Up. bound (My)

<< [1]::2::3::4 >> 1 / 4 go

Your query retrieved 186 records Records per page: 50













































































| Colour | Name | Level | Lower bound (My) | Upper bound (My) | | |
|---|-----------------------|-------|------------------|------------------|-----------|---|
|  | Aalenian | stage | | -174.000 | -170.000 |    |
|  | Aeronian | stage | | | |    |
|  | Albian | stage | | | |    |
|  | Albien | stage | | | |    |
|  | Anisian | stage | | | |    |
|  | Aptian | stage | | | |    |
|  | Aquitanian | stage | | -23.030 | -20.440 |    |
|  | Archean | eon | -4000.000 | | -2500.000 |    |
|  | Artinskian | stage | | | |    |
|  | Asselian | stage | | | |    |
|  | Aurignacien inférieur | stage | | | |    |
|  | Bajocian | stage | | | |    |
|  | Barremian | stage | | | |    |
|  | Barthonian | stage | | -41.200 | -37.800 |    |
|  | Bashkirian | stage | | | |    |
|  | Bathonian | stage | | | |    |
|  | Berriasian | stage | | | |    |
|  | Burdigalian | stage | | -20.440 | -15.970 |    |
|  | Calabrian | stage | | -1.800 | -0.781 |    |

Figure 48. Stratigraphy Search Interface

Leave all fields empty and click on the Search button to see existing references.



Resources

Stratigraphy.org

National Commission for Stratigraphy Belgium

If the stratigraphical unit doesn't exist, the user can add a new one using the add link. External resources are also proposed to help the stratigraphy check and creation.

Figure 49. Stratigraphy menu

Chronostratigraphy

by psemal — last modified Nov 24, 2020 09:19 AM — [History](#)

Before adding a new chronostratigraphy unit check first if it exists already in the database.

[+](#) [-](#) Add a Chronostratigraphy unit [?](#)

New Chronostratigraphic unit

Name

Local unit ?

Level

Status

Low. bound (My)

Up. bound (My)

Parent

Colour

Figure 50. Stratigraphy menu

4.5.3 Tools

This section describes the tools used for the collection of the specimen(s). The list of the available tools is automatically displayed.

Tools

by psemal — last modified Nov 24, 2020 09:19 AM — [History](#)

[🔍](#) List of Tools [?](#)

Collecting Tools Search

[Get tab-delimited](#)

« < [1]::2::3::4::5 > » 1 / 5 go

Your query retrieved 227 records Records per page: 50

| Name | Specimens count | Collections |
|---|-----------------|---------------------------|
| Agassiz trawl | 49 | Holothuroidea |
| Amphipod Trap | 13 | Malacostraca |
| Anchor | 0 | |
| Angling | 0 | |
| Apstein net | 12 | Malacostraca |
| Argos buoy | 0 | |
| Artificial substrate frame | 0 | |
| Baited traps | 19 | Malacostraca |
| balance a crabes | 8 | Malacostraca |
| Beam trawl | 1 | Malacostraca |
| Bell Planktometer | 0 | Malacostraca |
| Big bottom net | 0 | |
| Big Petersen net | 0 | |
| Big thin stramine net | 0 | |
| Big trawl with gaule | 0 | |
| Big trawl with gaule and declining irons | 0 | |
| Big trawl with gaule and thin against-bag | 0 | |
| Bongo net | 0 | |
| Bottle | 15 | Asteroidea; Holothuroidea |
| Bottle out of glass | 0 | |
| Bottom Eaanet | 0 | |

Figure 51. Tools Search Interface



Figure 52. Tools menu

If the tool doesn't exist, the user can add a new one using the add link.

Tools

by psemal — last modified Nov 24, 2020 09:19 AM — [History](#)

Before adding a new sampling tool check first if it exists already in the database.

[+](#) [🔍](#) List of Tools [?](#)

New tool

Cancel
Save

Figure 53. Tools Add Interface

After the creation, return to the search page and search the newly created tool.

| Name ▾ | Specimens count | Collections |
|---------------|-----------------|---------------|
| Agassiz trawl | 49 | Holothuroidea |

Figure 54. Tools selection interface

click on the edition icon to the right of the table of search results. Edit the tool information and save

Tools

by psemal — last modified Nov 24, 2020 09:19 AM — [History](#)

[🔍](#) [🔧](#) List of Tools [?](#)

⌵

Edit tool

New tool
Duplicate tool
Cancel
Delete
Save

Suggestions / Report problem

New Status

Status

Checked ▾

Comments

[Add](#)

Properties

| Type | Applies to | Values | Date From | Date To |
|----------------------------------|------------|--------|-----------|---------|
| + Add Properties | | | | |

Comments

| Notion | Comment |
|-----------------------|---------|
| + Add | |

External Links

| Link | Comment |
|-----------------------|---------|
| + Add | |

Figure 55. Tools Add interface

4.5.4 Methods

This section describes the methods used for the collection of the specimen(s). The list of the available methods is automatically displayed.

Methods

by psemal — last modified Nov 24, 2020 09:19 AM — [History](#)

 [List of Methods](#) 

Collecting Methods Search

Method Get tab-delimited

Search

« < [1]::2::3::4::5 > » 1 / 9 go

Your query retrieved 241 records Records per page: 50

| Name | Specimens count | Collections |
|---------------------|-----------------|---|
| 2m beam trawl | 712 | Bryozoa/Belgian Collection |
| 9 dredgings | 2 | General Collection |
| Agassiz Trawl | 526 | Brachiopoda / General collection; Bryozoa/General Collection; Holothuroidea; Malacostraca; Mollusca |
| Agassiz Trawl (AGT) | 272 | Malacostraca; Maxillopoda |

Figure 56. Method search Interface



Figure 57. Method menu

If the method doesn't exist, the user can add a new one using the add link.

Methods

by psemal — last modified Nov 24, 2020 09:19 AM — [History](#)

Before adding a new method check first if it exists already in the database.

 [List of Methods](#) 

New method

Cancel Save

Figure 58. Tools Add Interface

After the creation, return to the search page and search the newly created tool.


Collecting with a jar 0 

Figure 59. Method selection interface

click on the edition icon the right of the table of search results. Edit the method information and save

Edit method

New method Duplicate method Cancel Delete Save

▲ Suggestions / Report problem ✕

▲ **New Status** ✕

Status

Checked ▼

Comments

[Add](#)

▲ **Properties** ✕

| Type | Applies to | Values | Date From | Date To |
|---|------------|--------|-----------|---------|
| + Add Properties | | | | |

▲ **Comments** ✕

| Notion | Comment |
|------------------------------------|---------|
| + Add | |

▲ **External Links** ✕

| Link | Comment |
|------------------------------------|---------|
| + Add | |

Figure 60. Method Edit interface

4.6. Multimedia



Figure 61. Multimedia Menu

It is possible to upload files (pdf, images, XLS files) directly to a specimen. This approach is nevertheless not recommended because this operation has to be repeated manually for each specimen. Moreover the multimedia files can be very heavy and use too much space for the DaRWIn server.

For all multimedia files, it is better to use specific multimedia servers and link to the specimens in DaRWIn with the external links widget. This allows to link any resource managed by the institution or integrated in a shared or platform (public, commercial, etc).

For this reason the menu available in the DaRWIn can be configured to link to the specific Multimedia server(s) of the Institution.

see also annexe 9 - BBR/175/A3 NaturalHeritage: The Multimedia module of the DaRWIn Collection Management System

4.6.1 Picture(s)

If the resource is a IIIF compliant image server, the image can be directly viewed at high resolution using a IIIF viewer. The link is automatically proposed in DaRWIn just clicking the images in the thumbnail.



Figure 62. IIIF image viewer

RMCA is using a Collective Access server to store and render the images files. The IIIF viewer is Universal user by default.

If the Mirador viewer is installed, it is possible to include the IIIF image view in DaRWIN or in another CMS as Plone.

RBINS is using Plone sites for the storage and the rendering of the images files. The plone site is not a IIIF server but the display of high resolution files is very fast. Each specimen is a folderish object. All images of one specimen are stored in the specimen object. The DaRWIN UUID is encoded in the description of the specimen and a view of the DaRWIN data is available as a Data view. Moreover, a link to the advanced data view of DaRWIN is provided for registered users.

| External Links | |
|--|--------------------------|
| Url | Comment |
| Virtual collections link | RBINS VirtualCollections |

Figure 63. External link to Virtualcollections image server

Macrotermes gilvus borneensis Kemner, 1933

by [ksmistek](#) — last modified Dec 08, 2020 02:49 PM — [History](#)

Contributors: Picture: Florence Trus

Copyright: RBINS / DIGIT-3 Belspo Licence: CC BY NC ND

Current name: Macrotermes gilvus (Hagen, 1858)

DaRWIN UUID

1869a9ca-7cf1-4454-9d6b-23edeeceee1f9

Lead Image

No image

Lead Image Caption

Text

Collection Prince Leopold of Belgium. Expedition, 1929

Leopold III Fund for Nature Exploration and Conservation



Categorization


Related Items

a13c6eaad863433aab17e9eab6b55c2a

Contents

- [Macrotermes gilvus borneensis pt.jpg](#) — by [ftrus](#) — last modified Jul 20, 2018 01:27 PM
- [Macrotermes gilvus borneensis pt D.jpg](#) — by [ftrus](#) — last modified Jul 20, 2018 01:27 PM
- [Macrotermes gilvus borneensis pt L.jpg](#) — by [ftrus](#) — last modified Jul 20, 2018 01:27 PM
- [Macrotermes gilvus borneensis pt Data](#) — by [ksmistek](#) — last modified Mar 22, 2020 11:39 AM
- [Macrotermes gilvus borneensis pt s1 Lb2 Scaled.jpeg](#) — by [ciocatelli](#) — last modified Jul 20, 2018 01:27 PM

Figure 64. View of a specimen and images in the RBINS Virtualcollections

| EN FR NL ES | | DaRWIn search |
|--|---|--|
| Collection | | |
| Name: Types Virtual Collections ⓘ Institution: Royal Belgian Institute of Natural Sciences (RBINS) | | Conservator: Dekoninck Wouter (Dr.) ⓘ : Wouter.Dekoninck@natuurwetenschappen.be Staff Member: Kerkhof Stefan (Dhr.) |
| Classifications | | |
| Taxonomy: Macrotermes gilvus borneensis Kemner, 1933 ⓘ | | level sub species |
| Specimen Characteristics | | |
| Number of items : 1 Type : paratype Sex : unknown Stage : - | | |
| Country : Indonesia Indonésie Indonesië Indonesien Republic of Indonesia Republik Indonesia | | |
| Codes : EVCT.2334 UUID : 1869a9ca-7cf1-4454-9d6b-23edeecee1f9 | | |
| Associated comment | | |
| General Label 1/4 Samrinda (Borneo), 09/02/1929, Prince Leopold Label 2/4 Macrotermes gilvus Hagen v. borneensis n. Dr. Kemner det. 1930 : Label 3/4 Paratype Label 4/4 cf. Mém. Mus Hist. Nat. Belg. (hors série) IV, 8 (1933), p.27 p.26 fig.1 | | |
| You think there's a mistake ? please suggest us a correction | | |
| Your Name <input type="text"/> Comment <input type="text"/> | e-Mail <input type="text"/> Captcha <input type="checkbox"/> I'm not a robot |  reCAPTCHA Privacy - Terms |
| <input type="button" value="Submit"/> | | |

[View advanced data \(registered user only\)](#)

Figure 65. View of the DaRWIn data of a specimen in the RBINS Virtualcollections

4.6.2 D Surface Model(s)

The 3D files of RBINS and RMCA are stored on the sketchfab platform. It is a commercial platform but with interesting prices for Museums. The 3d models are stored on the sketchfab server and the 3D rendering is also managed by the Sketchfab solution. The 3D view of the specimens are embedded with Iframe in the different collection management systems of the institutions.

The link to the page with the Iframe(s) is encoded in DaRWIN as an external link.



Figure 66. View of a 3D view of a specimen in Sketchfab

3D files from 3DHOP servers can also be encoded as external links. The link is direct to the 3d file but the view is not embedded in the DaRWIN interface as 3DHOP avoids Iframe.

4.6.3 Sound(s)

The Sounds files can be linked to the DaRWIN specimens using the same approach. The files are stored on a dedicated external multimedia server in native format if recording infra and ultra sounds information (skipped by the MP3 compression) or in MP3 if only human audible sounds are concerned.

4.6.4 Video(s)

The Video files can be linked to the DaRWIN specimens using the same approach. The files are stored on a dedicated external multimedia server like Youtube and linked to the specimen using the external links widget in the Specimen edition.

4.6.5 LTP




The Long Term preservation platform of Belspo is used for the preservation of the digitisation files of the specimens. This allows linking directly the specimen to the LTP record in the RBINS/RMCA DIGIT system which stores the LTP metadata and the link to the LTP file(s). All multimedia files (1 by technique) are grouped in a ZIP file which is uploaded to the LTP system. Several links to LTP files can thus be encoded for one specimen.

4.7. Bibliography

It is possible to encode bibliographical references in DaRWIN and to link them to the specimen(s).

Bibliography

by psemal — last modified Nov 24, 2020 09:19 AM — [History](#)

  Search Bibliography 

Bibliography Search

Type

Title

Figure 67. Search bibliography interface (encoded in DaRWIN)

Bibliography

 Search Bibliography 

Reference Uri protocol URI Year


« [1] :: 2 :: 3 :: 4 :: 5 » 1 / 6 go

| Your query retrieved 251 records | | | Records per page: 50 | | |
|----------------------------------|------------|---|----------------------|------|---------|
| Type | URI | Title | Reference | Year | Authors |
| Article | 1881. | Liste des coquilles recueillies à Cannes par MM. E. et Ad. Dollfus. Feuilles jeunes Natur., 11e ann., pp. 117-121. | 1881 | | |
| Article | 1882-1886. | Les mollusques du Roussillon (In samenwerking met E. Bucquoy en G. Dollfus), I: Gastéropodes, 570 p., 66 pl. | 1882 | | |
| Article | 1883. | Liste des coquilles du golfe de Gabès. Journal de Conchyliologie, XXXI, pp. 289 - 330. | 1883 | | |
| Article | 1886-1887. | Etude préliminaire des coquilles fossiles des faluns de la Touraine (In samenwerking met G. Dollfus). Feuilles Jeunes Natur., 16e ann., pp. 77-80, 92-96, 101-105, 138-143; 17e ann., pp. 21-25, 33-36. | 1886 | | |
| Article | 1886. | Note sur l'Addisonia lateralis Requien. J. de C., XXXIV pp. 203-208. | 1886 | | |

Figure 68. Search bibliography results (encoded in DaRWIN)

The list of results displays bibliographic references corresponding to the search criteria. Icons on the right of the table allow editing, duplicating, and viewing the reference. The last icon links to the list of the specimens encoded in DaRWIN which are already related to the reference.

View Bibliography

| | |
|--------------------------------------|--|
| Type | Article |
| Title | 1881. Liste des coquilles recueillies à Cannes par MM. E. et Ad. Dollfus. Feuilles jeunes Natur., 11e ann., pp. 117-121. |
| Bibliographical reference | |
| Year | 1881 |
| Abstract | |
| URI | |
| Related specimens |  |
| <input type="text" value="Authors"/> | |

| External Links | |
|----------------|---------|
| Url | Comment |
| | |

Figure 69. Bibliographic reference view (encoded in DaRWIN)

The list of the related specimens is also available directly from the reference view using the “Related specimens” link.

To link a reference to a specimen, use the Specimen edition view and open the Bibliography widget.

| Bibliography | |
|--|---|
| Year : 1881 Title : 1881. Liste des coquilles recueillies à Cannes par MM. E. et Ad. Dollfus. Feuilles jeunes Natur., 11e ann., pp. 117-121. |  |
| Year : 2021 Title : Cirripedes (Thoracica, Crustacea) from the Maastrichtian of Kalaat Senan, Tunisia URL : https://dx.doi.org/10.1016/j.cretres.2020.104650 |  |
| Year : 2016 Title : Neandertal cannibalism and Neandertal bones used as tools in Northern Europe. Sci Rep 6, 29005 URL : https://dx.doi.org/https://doi.org/10.1038/srep29005 |  |
| <input type="button" value="Add bibliography"/> | |

Figure 70. Bibliographic references linked to a specimen (encoded in DaRWIN)

- The link in the Title opens the bibliographic reference encoded in DaRWIN.
- The link in the URI opens the reference or the pdf from an external resource.

Click “Add bibliography” and Choose a reference in the list of bibliographic references to add a new reference related to the specimen. You can also make a preliminary search in the selection list.

Choose a Bibliography
✕

Choose a bibliography

Type



Title

« < [1]::2::3::4::5 > » /

i Your query retrieved 249 records
Records per page:

| Type | Title | Year | |
|---------|--|------|---------------------------------------|
| Article | 1881. Liste des coquilles recueillies à Cannes par MM. E. et Ad. Dollfus. Feuilles jeunes Natur., 11e ann., pp. 117-121. | 1881 | <input type="button" value="Choose"/> |
| Article | 1882-1886. Les mollusques du Roussillon (In samenwerking met E. Bucquoy en G. Dollfus), t.I: Gastéropodes, 570 p., 66 pl. | 1882 | <input type="button" value="Choose"/> |
| Article | 1883. Liste des coquilles du golfe de Gabès. Journal de Conchyliologie, XXXI, pp. 289 - 330. | 1883 | <input type="button" value="Choose"/> |
| Article | 1886-1887. Etude préliminaire des coquilles fossiles des faluns de la Touraine (In samenwerking met G. Dollfus). Feuilles Jeunes Natur., 16e ann., pp. 77-80, 92-96, 101-105, 138-143; 17e ann., pp. 21-25, 33-36. | 1886 | <input type="button" value="Choose"/> |
| Article | 1886. Note sur l'Addisonia lateralis Requier. J. de C., XXXIV pp. 203-208. | 1886 | <input type="button" value="Choose"/> |
| Article | 1886. Nouvelle liste de coquilles de Cannes. Feuille Jeunes Natur., 16e année, pp.127 - 130. | 1886 | <input type="button" value="Choose"/> |
| Article | 1887-1898. Les mollusques marins du Roussillon (In samenwerking met E. Bucquoy en G. Dollfus), t. II: Pélécy-podes, 884 p., 99 pl. | 1887 | <input type="button" value="Choose"/> |
| Article | 1887. Description de deux espèces nouvelles du Tonkin (In samenwerking met Baron L. d'Hamonville). Ibid., p. 301-303. | 1887 | <input type="button" value="Choose"/> |
| Article | 1887. Description d'espèces nouvelles du Tonkin et observations sur quelques autres Mollusques de la même région. (In samenwerking met Baron L. d'Hamonville). Ibid., XXXV, pp. 213-225, pl. VIII. | 1887 | <input type="button" value="Choose"/> |
| Article | 1887. Une excursion malacologique à Saint-Lunaire (Ille et Vilaine) et aux environs de cette localité. Bull. Soc. Etudes Scient. Paris, 9e ann., 27 p. | 1887 | <input type="button" value="Choose"/> |
| Article | 1888. Descriptions de coquilles nouvelles des faluns de la Touraine (In samenwerking met G. Dollfus). Ibid., XXXVI, pp. 243-269, pl. XI-XII. | 1888 | <input type="button" value="Choose"/> |

Figure 71. Bibliographic references selection view (encoded in DaRWIN)

If the reference doesn't exist in the bibliography of DaRWIN, the user can encode the reference in the system using the   icons.

New bibliography

The screenshot shows a web form titled "New bibliography". On the left side, there is a vertical toolbar with a plus sign and a document icon. The form fields are as follows:

- Type:** A dropdown menu with "Article" selected.
- Title:** A large text input field.
- Year:** A text input field with a note below it: "(The year of publication (or, if unpublished, the year of creation) on 4 digits)".
- Abstract:** A large text input field.
- Bibliographical reference:** A large text input field.
- Link protocol:** A dropdown menu with a plus sign and the text "Add another protocol" below it.
- URI:** A text input field.

At the bottom of the form, there is a green bar labeled "Authors" with an "Add Author" button to its right. Below this bar are "Cancel" and "Save" buttons.

Figure 72. Bibliographic reference input interface

It is possible to encode:

- the type of reference,
- the title,
- the year of publication,
- the abstract
- and the full citation.
- It is also possible to link the reference to an external link (DOI or URL) which opens (in a new window) the full reference or the pdf from a bibliography repository or the editor website.


It is also possible (but not required) to link author(s) from the list of people already encoded in DaRWIN using "Add Author".

4.8 User Interface and Administration tools

4.8.1 DaRWIN Application shortcuts



Four icons appear in the first left menu

The  returns to the Home page of the DaRWIN Interface

The  links to the Profile / Preferences / Widgets settings of the DaRWIN interface

Profile



Edit My Profile


| | |
|-----------------------------|--|
| Title | Dr. <input type="button" value="v"/> <small>Add another title </small> |
| Gender | M <input type="button" value="v"/> |
| Given name | <input type="text" value="Patrick"/> |
| Family name | <input type="text" value="Semal"/> |
| Additional names | <input type="text"/> |
| Application Language | <input checked="" type="radio"/> English <input type="radio"/> Nederlands <input type="radio"/> Français |
| <hr/> | |
| Last seen | <p>> Show link with people <</p> <p>Edit your widgets</p> <p>View your rights on collections</p> |
| | <input type="button" value="Cancel"/> <input type="button" value="Save"/> |

Figure 73. Profile Settings of a DaRWIN user

The “Show link with people” establishes relationships with other DaRWIN people.

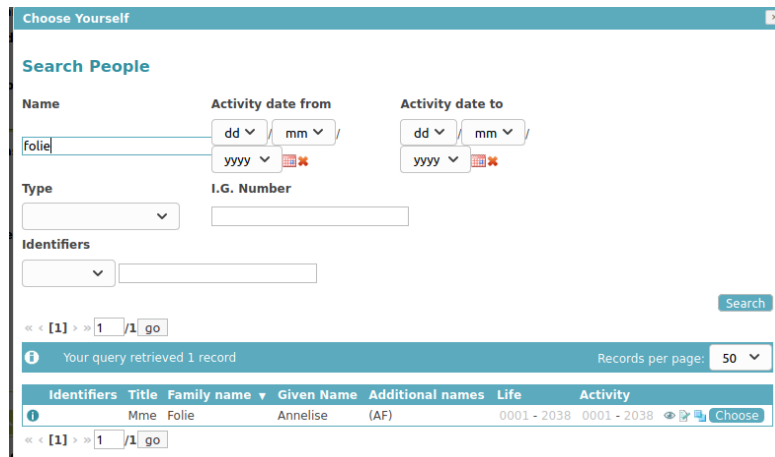



Figure 74. Search People to link to user profile

The  link open the preference settings

Preferences



My Preferences

Search in Specimens

Specimens default visible columns

- Category
- Collection
- Taxon
- Type
- Sampling Location
- Codes
- Chronostratigraphy


Board Widgets

- Number of saved specimens
- Number of saved searches
- Number of records per pages

Forms

- Display help icons
- Search option
- Exclude prefix in search

Figure 75. Preferences of the DaRWIn user

The  link opens the widgets settings

Widgets





Sf 1.5.12-dev config view logs 18432.0 KB 322 ms 6

List of widgets available for Semal Patrick (Dr.)

| Category/screen | Name | Deactivated | Activated | Visible | Widget | Opened | Custom title |
|-------------------------------|------------------|-----------------------|----------------------------------|-----------------------|--------|----------------------------------|--------------------|
| board_widget | addSpecimen | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | Add new specimen |
| | addTaxon | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | Add new taxon |
| | myChangesPlotted | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | My activity |
| | myLastsItems | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | My Last Actions |
| | myLoans | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | My loans |
| | news | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | News |
| | savedSearch | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | <input checked="" type="radio"/> | My saved searches |
| | savedSpecimens | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | <input checked="" type="radio"/> | My saved specimens |
| | stats | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | <input checked="" type="radio"/> | Statistics |
| | workflowsSummary | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | Workflows summary |
| catalogue_bibliography_widget | comment | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | Comments |
| | extLinks | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | <input checked="" type="radio"/> | External Links |
| | keywords | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | Keywords |
| | properties | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | Properties |
| | relatedFiles | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | Related Files |
| | biblio | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | <input checked="" type="radio"/> | Bibliography |
| | cataloguePeople | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | <input checked="" type="radio"/> | People |
| | comment | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | | <input type="radio"/> | Comments |

Figure 76. Widgets settings of the daRWIN user

The  allows to logout the DaRWIN session
 The click-on action will open a new window and logout the session. Close the windows and return to the main windows to login again if needed.

The  links to the ticketing system of DaRWIN

We develop a simple system for the tickets related to NaturalHeritage and DaRWIN.

List

by psemal — last modified Dec 02, 2020 05:33 PM — [History](#)

Show entries Search:

First Previous 1 Next Last

| Creation | Modification | Search | Items | tags |
|-------------------------------------|-------------------------------------|----------------------|--|---------------------------------|
| <input type="range" value="Today"/> | <input type="range" value="Today"/> | <input type="text"/> | . Add External link for bibliographic reference Use the External link widget to add link in Bibliographic widget using DOI or other hyperlink | DaRWIN |
| <input type="range" value="Today"/> | <input type="range" value="Today"/> | <input type="text"/> | . Create the full woriflow of RBINS bibliographic references to Orfeo Use NH as intermediate to export Bib References to Orfeo | Plone, OAI-PMH, NaturalHeritage |
| <input type="range" value="Today"/> | <input type="range" value="Today"/> | <input type="text"/> | . Find a system to avoid multiple encoding of taxonomy in the different DaRWIN systems | DaRWIN |
| <input type="range" value="Today"/> | <input type="range" value="Today"/> | <input type="text"/> | . Install a Collective Access server on the RBINS server Create a collective server for RBINS VirtualCollections | Plone, Collective Access |
| <input type="range" value="Today"/> | <input type="range" value="Today"/> | <input type="text"/> | . Test Free satellite images provider Google and Bing are limiting the free access to Satellite images | DaRWIN |

Showing 1 to 5 of 5 entries

Excel export

Figure 77. Ticketing system of DaRWIN (Plone users)

The list of the tickets can be searched and the ticket can be edited by the owner and

the people with the edition access rights. The Excel export provides all the data as an XLS file which allows easier and better reporting including time recording for each task. The ticket is divided in 5 sections:

The default section describes the request.

Default Workflow Follow-up Ownership Categorization

Title

Add External link for bibliographic reference

Summary
Used in item listings and search results.
Use the External link widget to add link in Bibliographic widget using DOI or other hyperlink

Product
NaturalHeritage
DaRWIN
Plone
Collective Access
LTP

Category
Bug
New Feature
Other Request

Full description

Patrick Semal
Tue 08/12/2020 18:13

Cher Franck
J'avance dans le manuel de darwin.
Voici mes demandes relatives à la bibliographie

Attached File
Browse... No file selected.

Save Cancel

Figure 78. Default section interface of a ticket

Default **Workflow** Follow-up Ownership Categorization

Priority
Intermediate ▾

State
No value ▾

Time Evolution
hours of development (7.36h/day and 180 days/year)
8

Time Realisation
Hours (integer)

Start date
 / January ▾ /

End date
 / January ▾ /

Attributed to
Franck
Jean-Marc
Patrick
Larissa
Didier

Save Cancel

Figure 79. Workflow section interface of a ticket

The Workflow section describes the analysis of the request, the proposed answer and the evaluation of the time and distribution of the tasks.

Default **Workflow** **Follow-up** Ownership Categorization

Work description

Source [Icons] [ABC]

B I U S X₂ X² [List icons] [Undo] [Redo]

Save Cancel

Figure 80. Workflow section interface of a ticket

The follow-up section documents the actions and the accomplished work.

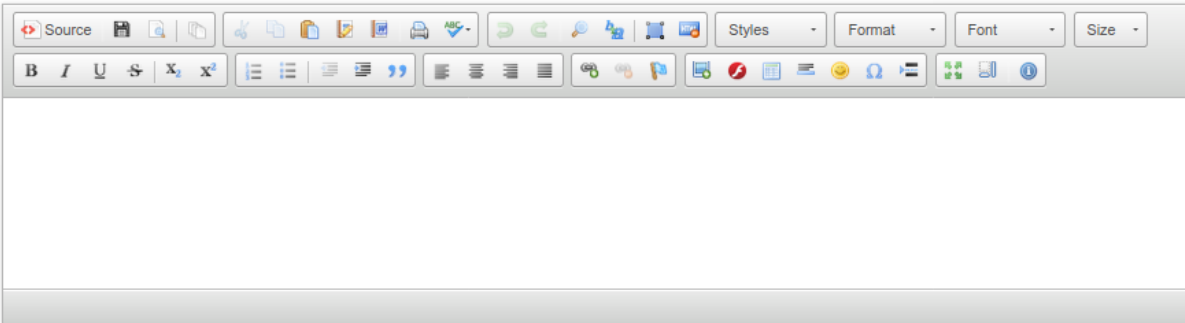
Each ticket allows a specific discussion tracing the exchanges between the requester and the developers.

Each task and related execution time can be recorded in the system using the “Time recording” child object.

Title ■

Summary
Used in item listings and search results.

Rich Task description



File
 No file selected.

Hours

Minutes

Attributed to

- Franck
- Jean-Marc
- Patrick
- Larissa
- Didier

Figure 81. Follow-up section interface of a ticket

- Title is the name of the task.
- Summary is the short description of the task displayed in the faceted list
- Rich Task description allows us to describe the task in detail.
- File allows you to upload an attached file.
- Hours and Minutes fields record the time information related to the task (integer fields).
- Attributed to specify the people to be counted for this task.

4.9. Reporting and statistics



Figure 82. Reporting menu

4.9.1 Collections statistics

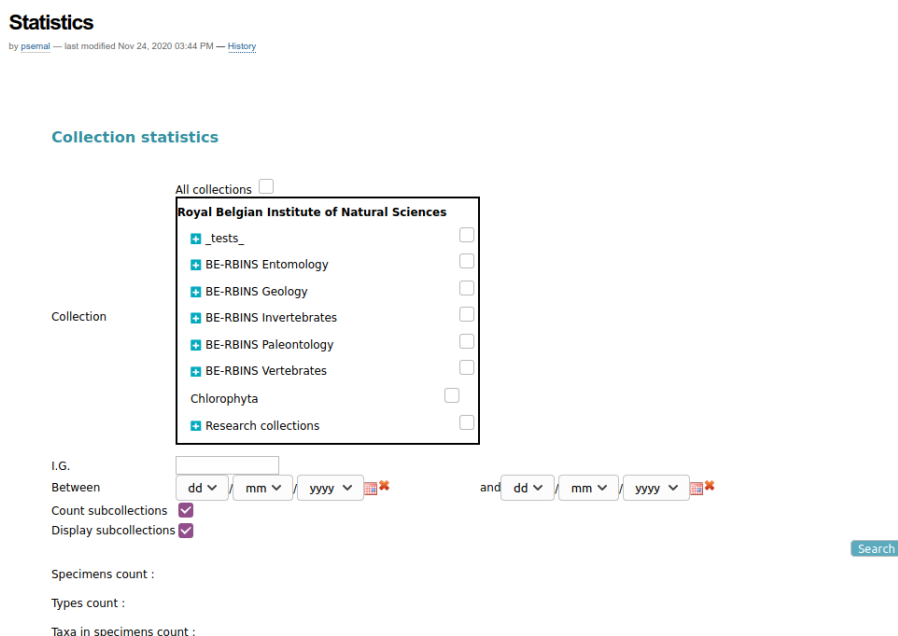


Figure 83. Collection statistics interface

This section presents the main statistics of the collections: specimens count, types count and taxa represented in the collection.

This view can also be embedded in an Iframe in an external service like the CETAF collections Registry using the following code:

```
<p>
<iframe height="1000" src="//darwin.naturalsciences.be/collections/statistics?menu=off" width="100%">
</iframe>
</p>
```

the url `darwin.naturalsciences.be` has to be adapted following the database url.

4.9.2 Reports

The list of reports displays the reports requested by the registered user. It is possible to download them as an XLS file.

| Report you asked | Comment | User | Download |
|-----------------------------------|-------------------------------|-------------------------|----------|
| Annual statistic by collections 0 | test Entomo 2nd semester 2019 | rmca rmca | Download |
| Encoders statistics | terry | Semal Patrick (M.) | Download |
| Encoders statistics | | Merland Alexandra (Mme) | Download |
| Encoders statistics | darwin inv 01-05-2020 | Semal Patrick (M.) | Download |
| Encoders statistics | vert 01-05-2020 | Semal Patrick (M.) | Download |
| Encoders statistics | 01-0-2020 IR | Semal Patrick (M.) | Download |
| Encoders statistics | marielle 2020 | Semal Patrick (M.) | Download |
| Encoders statistics | marielle 2 | Semal Patrick (M.) | Download |
| Encoders statistics | marielle 2020b | Semal Patrick (M.) | Download |
| Encoders statistics | marielle3 | Semal Patrick (M.) | Download |

Choose a report :

- Annual statistic by collections
- Listing taxonomic hierarchies from entry points given
- Scientific loan form
- Encoders statistics

Figure 84. Reports interface

The reporting system of DaRWIN provides several type of reporting:

- Annual statistics by collection (real time reporting)

Choose a report : Annual statistic by collections

| Collection | Date from | Date to | Format | Comment |
|-------------------|----------------|----------------|--------|---------|
| Choose Collection | dd / mm / yyyy | dd / mm / yyyy | xls | |

Add

Figure 85. Annual statistics interface

- Scientific loan form

Choose a report : Scientific loan form

| Loan | Target | Unit name from | Language | Format | Comment |
|-------------|---|--|----------|--------|---------|
| Choose Loan | RBINS copy Your copy Specimens copy Responsible copy | Taxonomy Chronostratigraphy Lithostratigraphy Lithology | English | pdf | |

Add

Figure 86. Scientific loans interface

- Encoder statistics

Choose a report : Encoders statistics

| Collection | Users array | Date from | Date to | Language | Format | Comment |
|-------------------|--|----------------|----------------|----------|--------|---------|
| Choose Collection | All Adam Marielle (Mlle) Backeljaou Thierry (Dr.) Beulens Annemie (Mevr.) | dd / mm / yyyy | dd / mm / yyyy | English | pdf | |

Add

Figure 87. Encoder(s) statistics interface

4.9.3 Pinned specimens

Specimens Search Result

Show URL

<< [1] >> 1 / 1 go

Your query retrieved:

- 9 records
- 9 distinct records based on I.G. and main collection tag
- 18 physical records (minimal estimate)
- 18 physical records (maximal estimate)

Records per page: 50

| Select all | Actions | Codes | Taxon | Type | Sex | Stage | Building | Floor | Room | Row | column | Shelf | Container | Container Storage | Loans |
|--------------------------|---------|-------|-------|-------|---|---------|----------|-----------|------|-----|--------|-------|-----------|-------------------|-------|
| <input type="checkbox"/> | | | | 10743 | Hyperolius discodactylus Abl. 1931 | Male | Unknown | De Vestel | 14 | 14C | 1 | | | alcohol | 0 |
| <input type="checkbox"/> | | | | 4837 | Xenopus muelleri (Peters, 1844) | Unknown | Unknown | De Vestel | 14 | 14C | 1 | | | alcohol | 0 |
| <input type="checkbox"/> | | | | 2882 | Phrynobatrachus bequaerti (Barbour & Loveridge, 1929) | Female | Unknown | De Vestel | 14 | 14C | 1 | | | alcohol | 0 |
| <input type="checkbox"/> | | | | 15214 | Rana graeca Boulenger, 1891 | Unknown | Unknown | De Vestel | 14 | 14C | | | | alcohol | 0 |
| <input type="checkbox"/> | | | | 8293 | Ptychadena mascareniensis (Duméril & Bibron, 1841) | Male | Unknown | De Vestel | 14 | 14C | 1 | | | alcohol | 0 |
| <input type="checkbox"/> | | | | 266 | Stauros nator (Günther, 1859) | Male | Unknown | De Vestel | 14 | 14C | 1 | | | alcohol | 0 |
| <input type="checkbox"/> | | | | 404 | Physalaemus gracilis (Boulenger, 1883) | Male | Unknown | De Vestel | 14 | 14C | 1 | | | alcohol | 0 |
| <input type="checkbox"/> | | | | 5674 | Arthroleptis stenodactylus Pfeffer, 1893 | Unknown | Unknown | De Vestel | 14 | 14C | 15 | | | alcohol | 0 |
| <input type="checkbox"/> | | | | 11988 | Triturus vulgaris vulgaris (Linnaeus, 1758) | Unknown | Larva | De Vestel | 14 | 14C | 1 | | | formalin | 0 |

Show URL

Remove selected

Save my pinned specimens Go

Figure 88. Specimen search view and pinning interface

Each registered user can pin some specific specimens in the results of his/her searches. These pinned specimens are then available for specific operations like the Mass Actions available through a specific menu or to include pinned specimens in the Loan forms.

4.9.4 Saved search

Specimens

by psemal — last modified Nov 24, 2020 09:19 AM

My saved specimens

☆ test export (9 items) March 23, 2020 4:41 PM

✖ Tab-delimited (specimens) Get report 📍

Figure 89. Specimen searches interface

Each registered user can save specific research and associated criteria. It is possible to pin specimens in this list for additional operations

4.9.5 Big Brother (admin only)

Hi Big Brother... I'm Watching You!

Between and User ref Table Action Record

dd / mm / yyyy dd / mm / yyyy /80973 go Search

<< [1] :: 2 :: 3 :: 4 :: 5 >> 1 /80973 go

Your query retrieved 4048631 records Records per page: 50

| Date | User | Relation | Record Id | Action |
|---------------------|----------------------|-----------------|-----------|----------|
| 2020/12/08 17:01:56 | Meurisse Linda (Mme) | specimens | 871345 | updated |
| 2020/12/08 17:01:02 | Meurisse Linda (Mme) | specimens | 871344 | updated |
| 2020/12/08 16:58:04 | Meurisse Linda (Mme) | specimens | 869879 | updated |
| 2020/12/08 16:57:17 | Meurisse Linda (Mme) | comments | 1429681 | deleted |
| 2020/12/08 16:56:07 | Meurisse Linda (Mme) | specimens | 597088 | deleted |
| 2020/12/08 16:56:07 | Meurisse Linda (Mme) | identifications | 1442670 | deleted |
| 2020/12/08 16:56:07 | Meurisse Linda (Mme) | identifications | 1559265 | deleted |
| 2020/12/08 16:56:07 | Meurisse Linda (Mme) | comments | 1153088 | deleted |
| 2020/12/08 16:56:07 | Meurisse Linda (Mme) | codes | 2504911 | deleted |
| 2020/12/08 16:55:57 | Meurisse Linda (Mme) | comments | 1811884 | inserted |
| 2020/12/08 16:55:57 | Meurisse Linda (Mme) | codes | 3737308 | inserted |
| 2020/12/08 16:55:57 | Meurisse Linda (Mme) | specimens | 597083 | updated |
| 2020/12/08 16:55:57 | Meurisse Linda (Mme) | specimens | 597083 | updated |
| 2020/12/08 16:53:49 | Meurisse Linda (Mme) | identifications | 1444609 | deleted |

Figure 90. Big Brother view (logbook)

The Big Brother tool allows the administrator(s) to report the complete history of the database addressing the dates, the users and the associated operations.

4.10 Loans and labels



Figure 91. Loans and labels menu

4.10.1 Loans

The DaRWIN system integrates a loan(s) tool for the creation, edition of loaning documents. The system is related to the specimens recorded in the database and the content of the form(s) can be modified by updates in the database. For this reason(s), users have to save the loan contract(s) as a PDF file and store them in an appropriate repository.

Loans Search

Name

Status

Between dd / mm / yyyy and dd / mm / yyyy

Person involved

I.G.

Contains Darwin items

<< [1] >> 1 /1 go Search

Your query retrieved 38 records Records per page: 50

| Name | Status | From | To | Description |
|------------------------|---------|------------|------------|---|
| R.I./85.54 | Running | 15/08/1985 | 14/12/2016 | Scientific loan Collection Dautzenberg IG 10591 |
| Loan I.I. 85/54 | New | 02/12/1985 | 02/06/1986 | Dautzenberg collection material (IG10.591) |
| Loan to be deleted | New | 01/01/2012 | 01/05/2012 | This is a loan to a fictive person |
| Test Loan | New | 08/06/2012 | 11/06/2012 | Testing the loan interface |
| diogenite research ULB | New | 06/09/2012 | | Johnstown diogenite |
| diogenite research ULB | New | 06/09/2012 | | Tatahouine diogenite |

Figure 92. Loans search interface

The different widgets can be activated for the visualisation of the loaning form.

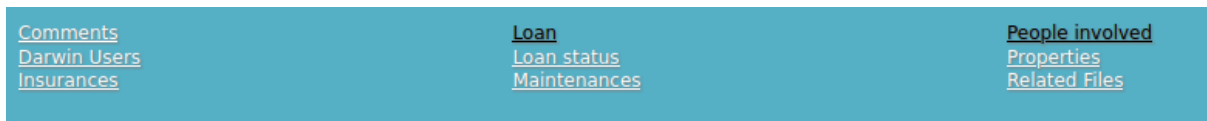


Figure 93. Widgets settings interface

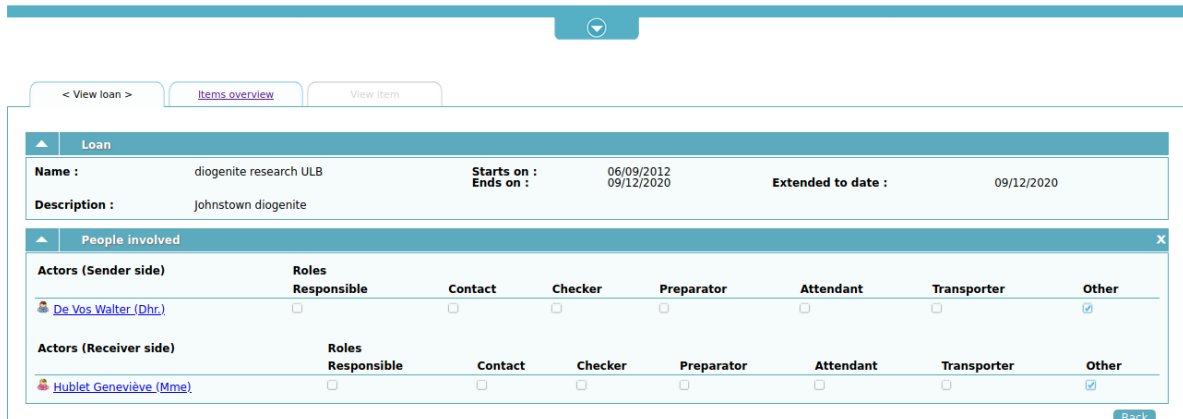


Figure 94. Loan view

The loan information links also to the list of specimens in DaRWIN.

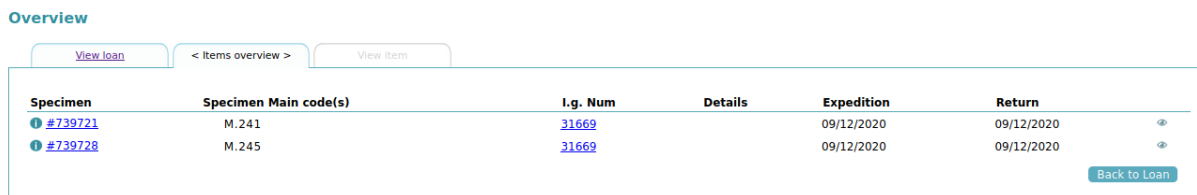


Figure 95. Loan related specimen view

If the loan contract does not exist in the system, a new one has to be created using the Add Loan link.

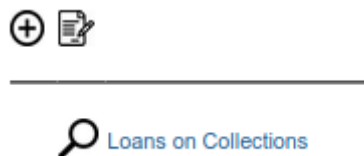


Figure 96. Loan add menu

It is also possible to visit the Loans section of other Collection management systems like Collections/Plone to view and to search the saved loans documents.

4.10.2 Labels

4.10.2.1 Export data from Darwin

- A. Do not use the export option available on the bottom of the Search form
- B. Save first your research in DarWIN
- C. Go to "My Preferences" menu
- D. Select "Saved Search"
- E. Click on the "get reports" option for the saved search corresponding to your labels in order to get the full export of data for the selected specimens.

4.10.2.2 Open export file in Notepad/Notepad++

- A. Select all text, titles included (CTRL+A)
- B. Copy selected, text copy (CTRL+C)

4.10.2.3 Download the template worksheet

- A. BE-RBINS VZ

4.9.2.4 Copy data in "RAW-DARWIN" worksheet

LibreOffice Calc Options has to be modified to allow macro to run (to do once). Go to the macro security setting in Tools - Options - LibreOffice - Security. Select the medium option + OK + OK

- A. Goto in "RAW-DARWIN" worksheet
- B. Erase all content
- C. Select first cell (A1).
- D. Paste (CTRL+V)

Column titles have to be pasted too. Otherwise the program won't work.

You can copy data from different exports if needed.

When you are ready, you can choose which format you wish to create by clicking on the corresponding button below.

Each format is visible on the example worksheet with the corresponding name followed by "TEMPLATE". These worksheets are protected from edition.

4.10.2.5. Create labels

Click on one of the buttons below, depending on the format. A new worksheet will be created, with your labels formatted.

You can edit each label in this worksheet if needed (example: abbreviate too long names or comments, adapt font size, etc.)

Screen will update, let the program work until you see a message "Done!"

4.11. Import series and Mass action(s)

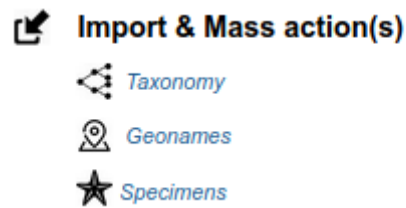


Figure 97. Import and Mass Action menu

4.11.1 Import Taxonomy

Taxonomy

Import Taxonomy

Import Taxonomy

| | |
|-------------------------|--|
| Source database : | <input type="text"/> |
| File : | <input type="text"/> |
| Format : | Taxonomy <input type="button" value="v"/> |
| Match invalid Units : | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| Specimen taxonomy ref : | Hybrids <input type="button" value="v"/> |
| Taxonomy kingdom : | Animalia (RBINS Reference) <input type="button" value="v"/> |

Figure 98. Import taxonomy from XLS file interface

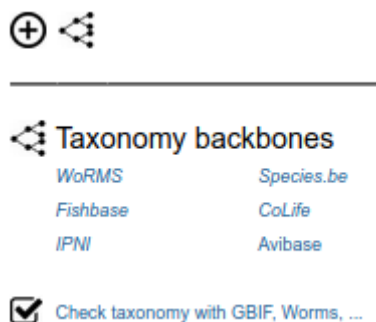


Figure 97. Taxonomy external resources menu

It is also possible to export a taxonomical branch from one DaRWIN system and import this branch to another DaRWIN system. Search first the taxon at the base of the branch in the Reference taxonomy in the Source DaRWIN and export the taxonomy as CSV (tab delimited).

Taxonomic unit Search

Use the character ^ for a "Start with" search (eg: ^falco)

Name **Level** **CITES** Yes No Yes or No

Collection **Taxonomy** **Ig number**

<< [1] >> 1 / 1 go

Your query retrieved 2 records Records per page: 50

| Name | Level | Taxonomy name | CITES |
|-----------------------|-------|-----------------|-------|
| Canis Linnaeus, 1758 | genus | RBINS Reference | |
| Canistrum Mörch, 1852 | genus | RBINS Reference | |

<< [1] >> 1 / 1 go

Figure 98. Import geonames from XLS file interface

Open it with LibreOffice Calc or Excel to edit the file and import it using the import Taxonomy widget in the new DaRWIn.

This procedure allows to transfer taxonomical branches from one DaRWIn to another avoiding multiple manual encoding which is very time consuming.

4.11.2 Import Geonames

Geonames

 [Import Geonames](#) 

Import Locality

Source database :

File :

Format :

Collection :

Figure 98. Import Geonames from XLS file interface

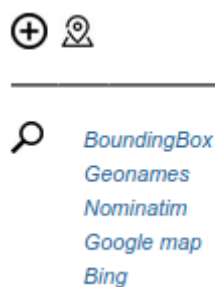


Figure 99. Geonames external resources menu

4.11.3 Import Specimens

Specimens

Before importing specimens check first if it exists already in the database.

[🔗](#) [★](#) Import Specimens [?](#) [XLS Template](#)

Import Specimens


| | |
|-------------------------|--|
| Source database : | <input type="text"/> |
| File : | <input type="text"/>  |
| Format : | <input type="text" value="ABCD"/> ▾ |
| Collection : | <input type="button" value="Choose !"/> |
| Specimen taxonomy ref : | <input type="text" value="All"/> ▾ |
| Enforce code unicity : | <input checked="" type="checkbox"/> |

Figure 100. Import Specimens from XLS file interface

Author : Patrick Semal and Franck Theeten