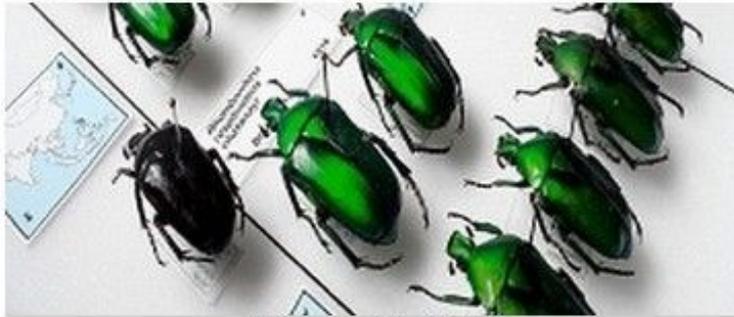




SSH : Scientific Service of Heritage  
WDP : Wetenschappelijke Dienst Patrimonium  
SSP : Service scientifique du Patrimoine



Entomology & Arachnides



Recent invertebrates



Geology



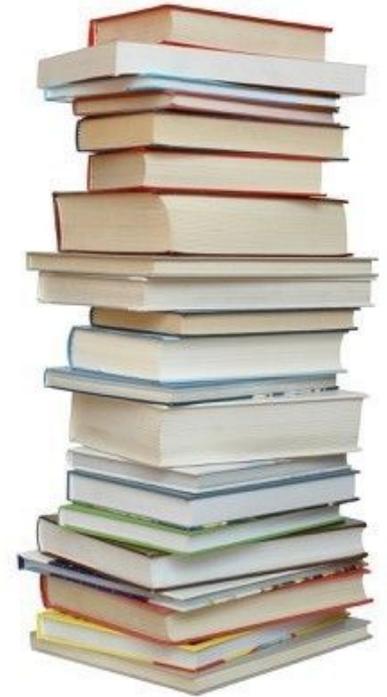
Paleontology



Recent Vertebrates



Anthropology & Prehistory



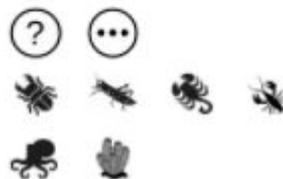
650.000 books

38.000.000 specimens

### Anthropology



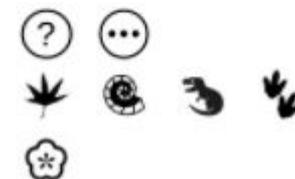
### Invertebrates



### Vertebrates



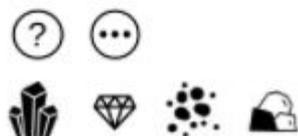
### Palaeontology



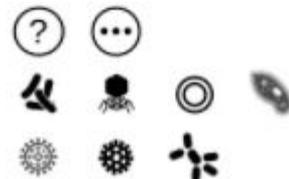
### Algae, Fungi, Plants



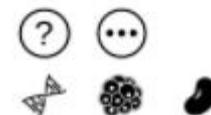
### Geology



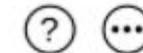
### Microbiology



### Biobank(s)



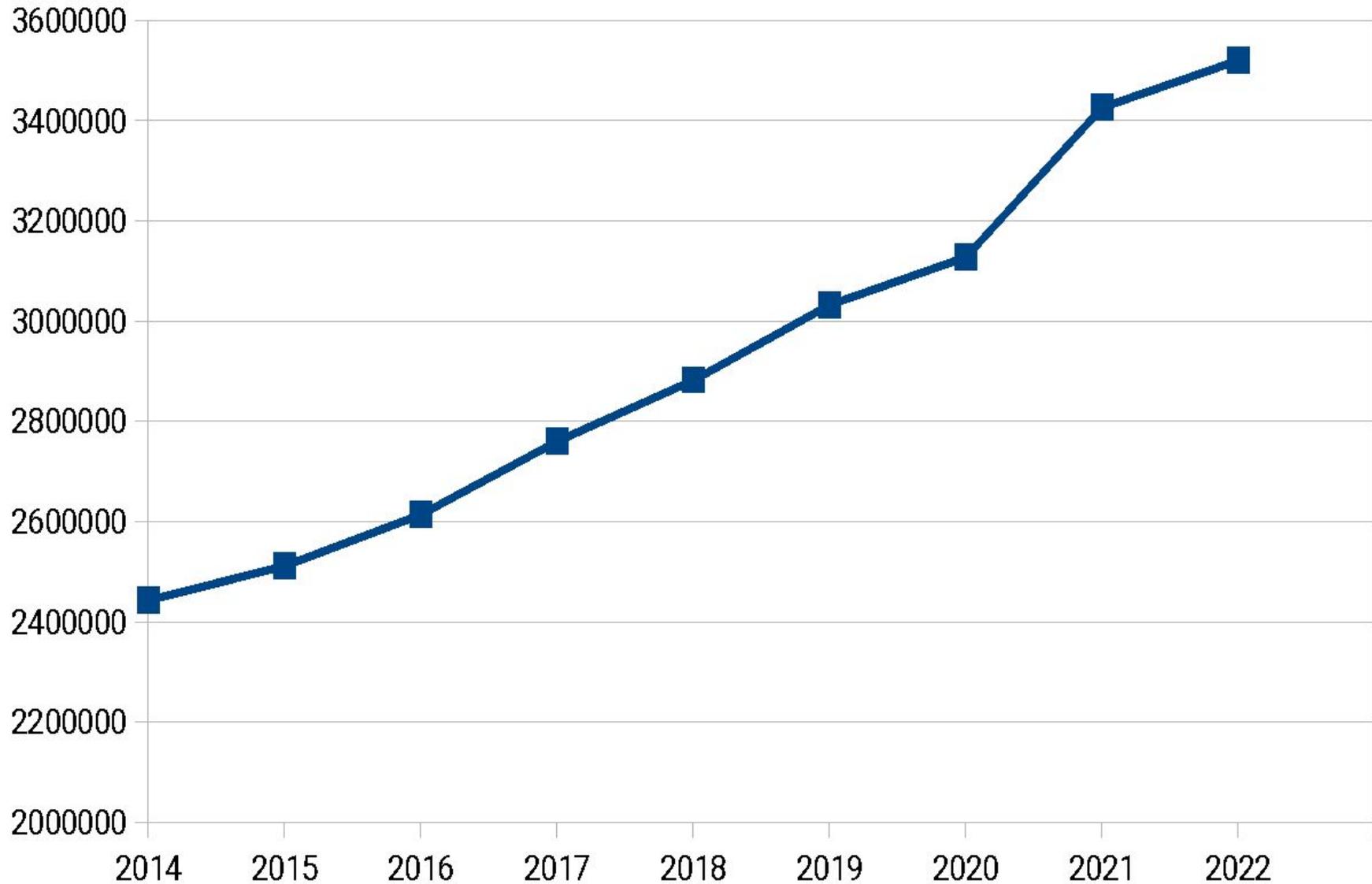
### Mixed Collections



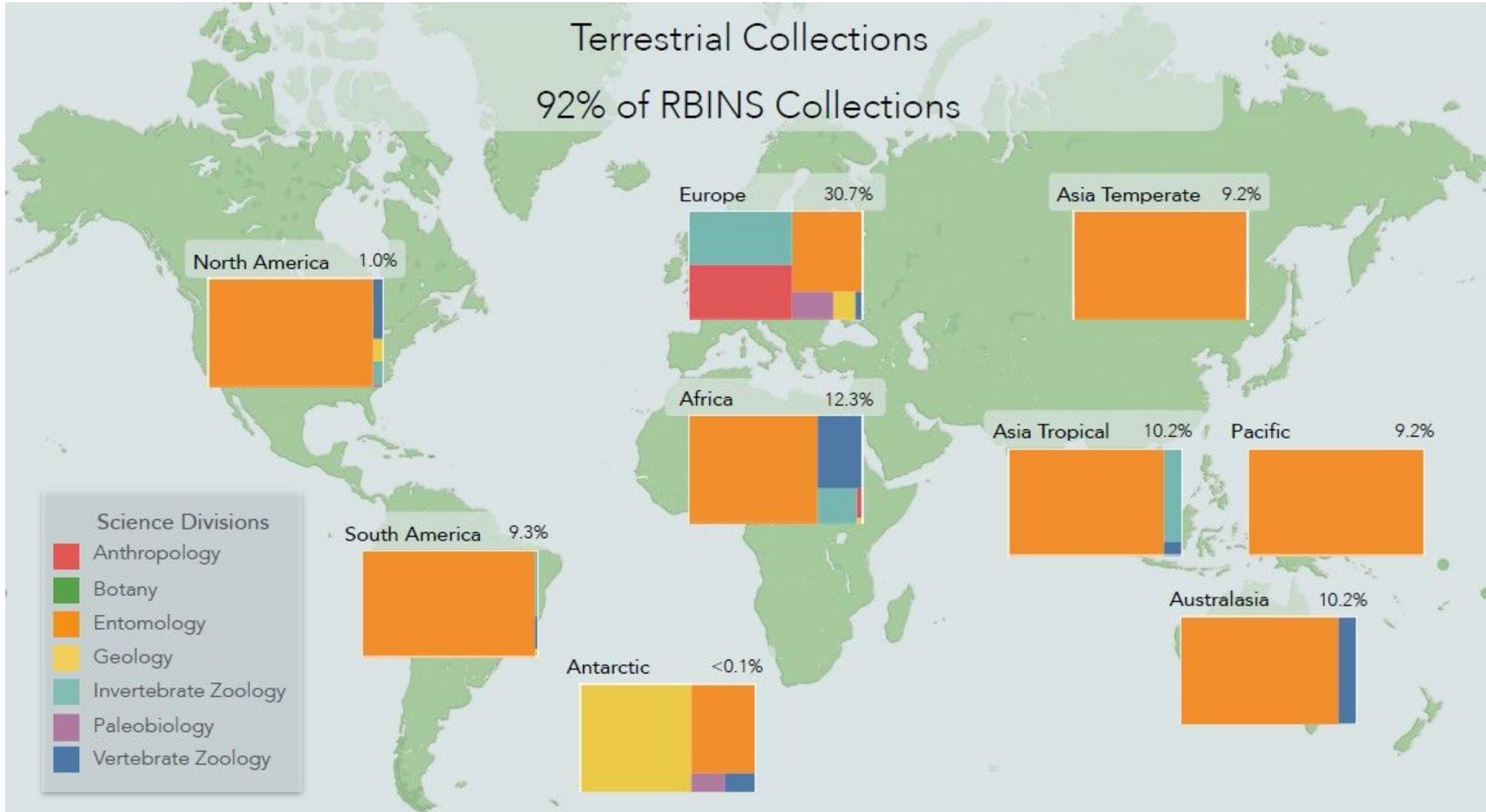
### Extraterrestrial



# RBINS Digitisation : 2015 - 2022



# Geographic distribution of the collections





Distributed System of Scientific Collections



Distributed System of Scientific Collections

[Home](#)
[DiSSCO](#)
[Services](#)
[Participate](#)
[Communications](#)
[About](#)
[DiSSCO Prepare](#)

# Distributed System of Scientific Collections

1,5 billion specimens. 5,000 scientists. 170+ institutions. 23 countries  
... in 1 European collection.

DiSSCO  
**A world-class research infrastructure**

The Distributed System of Scientific Collections is a new world-class Research Infrastructure (RI) for Natural Science Collections. The DiSSCO RI aims to create a new business model for one European collection that digitally unifies all European natural science assets under common access, curation, policies and practices that ensure that all the data is easily Findable, Accessible, Interoperable and Reusable (FAIR principles).

**Biodiversity Knowledge Hub**  
NOW LIVE

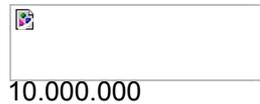
Say hello to the BiCikl's Biodiversity Knowledge



# DiSSCo.be



38.000.000



10.000.000



4.000.000



600.000



75.000



15.000



150.000



35.000



15.000



9.000



5.000.000



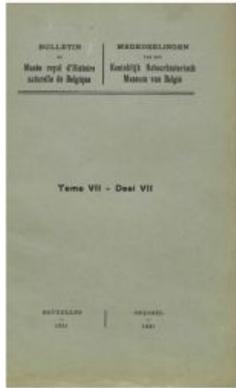
500.000



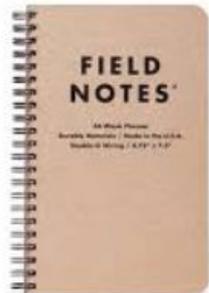
300.000



# Hub to Dissco



NATURALHERITAGE



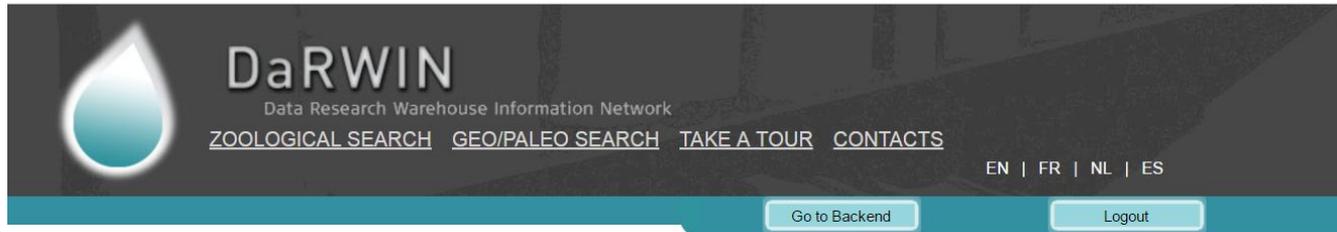
(re)Create links



## A OpenSource Natural History Collection Management system aligned with DiSSCo requirements



# RBINS & RMCA: DarWIN (Open Source, in house)



## 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 Bernissart, 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 (1712-1780) 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](http://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 (540.000 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](http://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-programmes/94](http://www.naturalsciences.be/en/science/do/25/scientific-research/research-programmes/94) And [odnature.naturalsciences.be/home/](http://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](#) 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 collections!

### Discover some random specimens :

- [Mammalia / Myotis myotis \(Borkhausen, 1797\)](#)
- [Mollusca / Cardium norvegicum Spengler, 1792](#)
- [Mammalia / Mastomys natalensis microdon \(Peters, 1852\)](#)



**DarWIN : EXPORT to BIOCASE and**



## Open Source

- PostgreSQL
- PostGIS
- OpenLayers
- PHP, symfony

## Scope & target

- Scalable (>100 millions)
- Professional public
- Export to international aggregators (GBIF)

## Problems

- Taxonomy oriented
- Still in development and ... already "too old"
- Not agile
- **No google search !**

# DarWIN : questions and answers



[https://www.naturalheritage.be/darwin/QandA/#c2=all&b\\_start=0](https://www.naturalheritage.be/darwin/QandA/#c2=all&b_start=0)



Search Site  Search  
 only in current section

You are here: [Home](#) / [DaRWiN](#) / [Questions and Answers](#)

## Questions about the DaRWiN Collection Management System

### Category

All (102) Attachments (10) Business model (7) Client-specific customization (8) DaRWiN (1) Data entry, import, export and validation (8) Data normalization/standardisation (9) Data querying (10) Geography (11) Legal requirements (2) Management tools (9) Public access (2) Technical details (8) Technical support and documentation (12) User management/security (6) VirtualCollections (1) Vision/main customers (4)

Show  entries

Search:  [First](#) [Previous](#) [1](#) [2](#) [Next](#) [Last](#)

Items	tags
<a href="#">1. How many years has the CMS been in use?</a>	Business model
<a href="#">2. How large is the current software development team?</a>	Business model
<a href="#">3. What is the roadmap and schedule for future developments and new releases?</a>	Business model
<a href="#">4. What is the CMS distribution approach (on-premise, cloud or hybrid)?</a>	Business model
<a href="#">5. What kind of pricing model is applied?</a>	Business model
<a href="#">6. Is the CMS open-source or proprietary?</a>	Business model
<a href="#">7. How are change requests from users submitted and how are they prioritized?</a>	Business model
<a href="#">8. How are users consulted about planned changes to the CMS?</a>	Vision/main customers
<a href="#">9. What are the key characteristics that differentiate your CMS?</a>	Vision/main customers
<a href="#">10. What are your target customers?</a>	Vision/main customers
<a href="#">11. How many institutions are customers?</a>	Vision/main customers
<a href="#">12. What is the underlying database system (e.g. MySQL/PostgreSQL/...)?</a>	Technical details
<a href="#">13. Which other main technologies were used to build the CMS?</a>	Technical details
<a href="#">14. Which operating systems are supported (Windows/Mac/Linux)?</a>	Technical details
<a href="#">15. What are the system storage limits?</a>	Technical details
<a href="#">16. What is the maximum number of users?</a>	Technical details
<a href="#">17. What is the maximum number of concurrent users?</a>	Technical details
<a href="#">18. How are backups and data recovery managed?</a>	Technical details
<a href="#">19. Does the CMS support API's to communicate with different databases/applications? If so, what request methods are supported?</a>	Technical details
<a href="#">20. Is there a customer helpdesk to deal with general questions and issues?</a>	Technical support and documentation
<a href="#">21. Is the helpdesk email only or is telephone support also available?</a>	Technical support and documentation
<a href="#">22. Is the helpdesk available year-round?</a>	Technical support and documentation

# DarWIN : GitHub Repository

naturalsciences / natural\_heritage\_darwin Public

<> Code Issues Pull requests Actions Projects Wiki Security Insights

DEV\_2021 32 branches 0 tags Go to file Code

**ftheeten** Additional doc for the importation templates b28c7bc 4 days ago 🕒 131 commits

darwin	1: Compatibility with PHP8.0 (darwin/lib/vendor/symfony/lib/util/sfFi...	20 days ago
db_schema	1: Compatibility with PHP8.0 (darwin/lib/vendor/symfony/lib/util/sfFi...	20 days ago
doc	Additional doc for the importation templates	4 days ago
libreoffice	Added libreoffice database	2 years ago
reports_pentaho	Add reports generated in Pentaho to the project	4 years ago
.gitignore	Init commit :	12 months ago
README.md	Update README.md	16 months ago

**README.md**

## Natural Heritage Darwin :

This is the repository of the Darwin CMS for natural sciences collections, hosted at the RBINS.

This version has been developed within the framework of the BELSPO project NaturalHeritage (2017-2019).

It runs on PostgreSQL 9.6 and a forked version of the Symfony 1.4 framework (Lexpress : <https://github.com/FriendsOfSymfony1/symfony1>), which is compliant with PHP 7+. Sources of this framework are embedded in the vendor folder.

**About**  
No description, website, or topics provided.  
Readme

**Releases**  
No releases published

**Packages**  
No packages published

**Contributors** 2

- ftheeten Franck Theeten
- jmherpers

**Languages**

PHP	38.3%	PLpgSQL	30.3%
JavaScript	16.3%	VBA	13.5%
CSS	1.1%	HTML	0.2%

# DarWIN : Native Interface



PHP, Symfony

The screenshot displays the DarWIN Native Interface. At the top, there is a navigation bar with tabs: My Preferences, Searches, Add, Administration, and Help. A home icon is on the left, and a power icon is on the right. Below the navigation bar, the 'Add' menu is open, showing options: Catalogues », Specimens, Collections, and Loans. The 'Administration' menu is also open, listing: Taxonomy, Chronostratigraphy, Lithostratigraphy, Lithology, Mineralogy, Expeditions, RBINS I.G. Numbers, Institutions, People, Sampling location, Collecting Methods, Collecting Tools, and Bibliography. On the left, a 'Statistics' panel shows a tree view with 'All types and the record count associated' and 'All objects in DarWIN' (Total: 2793149). A note at the bottom of the statistics panel reads 'Statistics generated at 14/05/2018 - 12:00'. On the right, a table shows a list of actions:

Operation	Action
actions_rights	inserted
actions	inserted
actions_rights	inserted
actions_rights	inserted
actions_rights	inserted
actions	updated
actions_rights	updated
actions	updated
actions_rights	inserted
action_maintenance	inserted

# DarWIN : New Interface



Integration in any website.

You are here: [Home](#) / [DaRWiN](#)



Search

Zoology  
 Paleontology

## Dashboard

by [mars](#) — last modified Apr 27, 2018 12:00 PM



**Statistics**

**All types and the record count associated**

---

**All objects in DaRWiN**

- Total : 2793149

*Statistics generated at 14/05/2018 - 12:00*

**My Last Actions**

Date	Relation	Action
02.05.11 (pm)	collections_rights	inserted
02.05.11 (pm)	collections	inserted
02.05.11 (pm)	collections_rights	inserted
02.05.11 (pm)	collections_rights	inserted
02.05.11 (pm)	collections_rights	inserted
02.05.11 (pm)	collections	updated
03.05.11 (am)	collections_rights	updated
03.05.11 (am)	collections	updated
03.05.11 (pm)	collections_rights	inserted
07.06.12 (pm)	collection_maintenance	inserted

« < [1] :: 2 :: 3 :: 4 :: 5 > »

Add

Administration  
*Institution* *Collection*  
*People* *I.G. number*

Item  
*Specimen* *Mineralogy*  
*Taxonomy* *Lithology*

Sampling  
*Location* *Methods*  
*Expedition* *Tools*  
*Chronostratigraphy*

Multimedia  
*Picture* *LTP*  
*3D Sketchfab*

Bibliography  
*DaRWiN*  
*BiblioPhone*

**Import & Mass action(s)**  
*Taxonomy*  
*Geonames*  
*Specimens*

**Reporting**  
*Statistics*  
*My Reports*  
*Pinned Specimens*

**Loans & Labels**  
*Loans*  
*Labels*

**Shortcuts**  
 Outlook Word  
 OneDrive Excel

# DarWIN : New Interface



Integration in any website.

You are here: Home / DaRWiN / RBINS

## Dashboard

Click on to access to contextual help.

▼

▲ My activity ↻ X

Week Month Year

▲ My Last Actions ↻ X

Date	Relation	Action
02.05.11 (pm)	collections_rights	inserted
02.05.11 (pm)	collections	inserted
02.05.11 (pm)	collections_rights	inserted
02.05.11 (pm)	collections_rights	inserted
02.05.11 (pm)	collections_rights	inserted
02.05.11 (pm)	collections	updated
03.05.11 (am)	collections_rights	updated
03.05.11 (am)	collections	updated
03.05.11 (pm)	collections_rights	inserted
07.06.12 (pm)	collection_maintenance	inserted

« < [1]::2::3::4::5 > » 1 / 368 go

▲ Statistics ↻ X

All types and the record count associated

---

All objects in DaRWiN

▲ My saved searches ↻ X

Manage

↑

Search

Specimen

---

Administration

Institution

Collection

Expedition

People

Inventory

Nagoya ABS

---

Item

Specimen

Mineralogy

Taxonomy

Lithology

---

Sampling

Location

Tools

Chronostratigraphy

Methods

---

Multimedia

Picture

3D Sketchfab

Video Youtube

Sound

LTP

---

Bibliography

DaRWiN

[biblio.naturalsciences.be](http://biblio.naturalsciences.be)

Home

Settings

Help

Navigation

Reporting

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

Loans & Labels

- Loans
- Labels

Import & Mass action(s)

- Taxonomy
- Geonames
- Specimens

*Mass Action(s)*

*Testing import*

# DarWIN : New Interface



## Administration

-  Institution
-  People
-  Collection
-  Inventory
-  Expedition
-  Nagoya ABS



**Administrative information**

## Item

-  Specimen
-  Taxonomy
-  Mineralogy
-  Lithology



**Specimen / Taxonomy**

## Sampling

-  Location
-  Chronostratigraphy
-  Tools
-  Methods



**Sampling / collecting**

## Multimedia

-  Picture
-  Sound
-  3D Sketchfab
-  LTP
-  Video Youtube



**Multimedia links**

## Bibliography



**Bibliography references and links**

## Collection List

Search collection :

### Royal Belgian Institute of Natural Sciences

- [\\_tests\\_](#)   
- [BE-RBINS Anthropology](#)   
- [BE-RBINS Biobank](#)   
- [BE-RBINS Entomology](#)   
- [BE-RBINS Geology](#)   
- [BE-RBINS Invertebrates](#)   
- [BE-RBINS Paleontology](#)   
- [BE-RBINS Vertebrates](#)   
  - [Amphibia](#)   
    - [Amphibia Types](#)   
  - [Aves](#)   
    - [Aves Not visible](#)   
    - [Aves Types](#)   
  - [Mammalia](#)   
    - [Mammalia Types](#)   
    - [Rhinocerotidae](#)   
  - [Pisces](#)   
    - [Pisces Type specimens](#)   
  - [Reptilia](#)   
    - [Reptilia Not visible](#)   
    - [Reptilia Types](#)   
  - [Type Specimens](#)   
    - [Types non public](#)   
  - [Vertebrates DNA](#)   

## DaRWIN CMS:

- Collection with subcollections
- Collections statistics
- MIDS values

Specimens count :

collection name	nb database records	nb physical specimens low	nb physical spe
BE-RBINS Vertebrates/Aves/Aves Types	193	195	195

Types count :

collection name	type	nb database records	nb physical specimens low	nb physic
Aves Types	allotype	3	3	3
Aves Types	cotype	4	4	4
Aves Types	holotype	81	83	83
Aves Types	paratype	27	27	27
Aves Types	type	13	15	15
<b>TOTAL</b>		<b>128</b>	<b>132</b>	<b>132</b>

Taxa in taxonomic identifications :

collection name	level name	nb database records
Aves Types	variety	2
Aves Types	sub species	40
Aves Types	species	125
Aves Types	genus	102
Aves Types	tribe	6
Aves Types	sub family	22
Aves Types	family	48
Aves Types	sub order	14
Aves Types	order	19
Aves Types	class	2
Aves Types	sub phylum	1
Aves Types	phylum	1
Aves Types	kingdom	1
Aves Types	domain	1
<b>TOTAL</b>		<b>384</b>

# DarWIN : Collection(s) CODE et UID



## Edit Collection

Public collection

Code

Unique identifier

Name

Institution

Collection type

Conservator

Staff Member

Parent collection

Preferred taxonomy

Allow duplicates

Nagoya

Users	Rights		
Cuppens Hilde (Mevr.)	Encoder	On sub collections...	✘
Walschaerts Terry (Mme)	Encoder	On sub collections...	✘
Semal Patrick (Dr.)	Conservator	On sub collections...	✘
Bruaux Sébastien (M.)	Encoder	On sub collections...	✘
Folie Annelise (Mme)	Conservator	On sub collections...	✘
DEBUG_ADMIN DEBUG_ADMIN	Conservator	On sub collections...	✘
Pauwels Olivier S. G. (M.)	Conservator	On sub collections...	✘
rmca rmca	Conservator	On sub collections...	✘
TEMPLATE_IMPORT TEMPLATE_IMPORT	Conservator	On sub collections...	✘
Olivier Pauwels	Conservator	On sub collections...	✘

## DaRWiN CMS:

- Roles:
  - Conservator,
  - Collection manager,
  - Encoder
  - User
- Users management

Code prefix	Code prefix sep.	Code suffix sep.	Code suffix	Auto incremented ?	...for new spec. only ?	Last value	Inherits autoincrement from parent	Duplicate specimen codes	Code mask
BE RBINS V7 Reptilia				<input type="checkbox"/>	<input type="checkbox"/>	172878	<input type="checkbox"/>	<input type="checkbox"/>	



# DarWIN : Taxonomy(ies)



## Taxonomy

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

  Add a taxon 

### New Taxonomic unit

Name	<input type="text"/>
Taxonomy	<input type="text" value="RBINS Reference"/>
Level	<input type="text" value="species"/>
Status	<input type="text" value="valid"/>
Extinct	<input type="checkbox"/>
CITES	<input type="checkbox"/> 
Sensitive info withheld	<input type="checkbox"/>
Parent taxon	<input type="text" value="Choose Parent"/> 

# DarWIN : New Interface



Search Site    
 only in current section

You are here: [Home](#) / [DaRWiN](#) / [RBINS](#) / [Taxonomy](#)

## Taxonomy

[Search Taxonomy](#)



### Taxonomy backbones

- [GBIF](#)
- [WoRMS](#)
- [Fishbase](#)
- [Molluscabase](#)
- [Avibase](#)
- [COL](#)
- [Species.be](#)
- [IPNI](#)

Check taxonomy with GBIF, Worms, ...

### Taxonomic unit Search

Use the character \* for a "containing" search (eg: \*falco)

<b>Name</b>	<b>Level</b>	<b>CITES</b>	<b>Status</b>
<input type="text"/>	All <input type="button" value="v"/>	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes or No	ALL <input type="button" value="v"/>
<b>Collection</b>	<b>Taxonomy</b>	<b>Ig number</b>	
Choose Collection	All	<input type="text"/>	
<b>Workflow statuses</b>	<b>Agent (problem/suggestion)</b>	<b>Workflow from date</b>	<b>Workflow to date</b>
<input type="button" value="v"/>	<input type="text"/>	dd <input type="button" value="v"/> / mm <input type="button" value="v"/> / yyyy <input type="button" value="v"/>	dd <input type="button" value="v"/> / mm <input type="button" value="v"/> / yyyy <input type="button" value="v"/>



The search is case sensitive. Use appropriate Upper and lower cases.

Rank:

Name:

# Taxonomy

## Taxonomic unit Search

Use the character \* for a "containing" search (eg: \*falco)

<b>Name</b>	<b>Level</b>	<b>CITES</b>	<b>Status</b>
<input type="text" value="canis"/>	<input style="border: 1px solid black;" type="text" value="All"/>	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes or No	<input style="border: 1px solid black;" type="text" value="ALL"/>
<b>Collection</b>	<b>Taxonomy</b>	<b>Ig number</b>	
<input type="text" value="Choose Collection"/>	<input style="border: 1px solid black;" type="text" value="All"/>	<input type="text"/>	

Search

« < [1] > » 1 / 1 go

**i** Your query retrieved 28 records

Records per page: 50 ▼

Name ▼	Status	Synonyms	Level	Taxonomy name	CITES
<b>i</b> <i>Canis adustus bweha</i> Heller, 1914			sub species	RBINS Reference	
<b>i</b> <i>Canis adustus</i> Sundevall, 1847			species	RBINS Reference	
<b>i</b> <i>Canis aureus anthus</i> Cuvier, 1820			sub species	RBINS Reference	
<b>i</b> <i>Canis aureus</i> Linnaeus, 1758			species	RBINS Reference	
<b>i</b> <i>Canis aureus soudanicus</i> Thomas, 1903			sub species	RBINS Reference	
<b>i</b> <i>Canis familiaris dingo</i> (Meyer, 1793)			sub species	RBINS Reference	
<b>i</b> <i>Canis familiaris</i> Linnaeus, 1758			species	RBINS Reference	
<b>i</b> <i>Canis latrans</i> Say, 1823			species	RBINS Reference	
<b>i</b> <i>Canis</i> Linnaeus, 1758			genus	RBINS Reference	
<b>i</b> <i>Canis lupus f.familiaris</i>			species	RBINS Reference	
<b>i</b> <i>Canis lupus</i> Linnaeus, 1758			species	RBINS Reference	

# DarWIN : New Interface



You are here: [Home](#) / [DaRWiN](#) / [RBINS](#) / Taxonomy

## Taxonomy

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

Add a taxon



### Taxonomy backbones

[WoRMS](#) [Species.be](#)  
[Fishbase](#) [CoLife](#)  
[IPNI](#) [Avibase](#)

Check taxonomy with GBIF, Worms, ...

### New Taxonomic unit

Name	<input type="text"/>
Taxonomy	<input type="text" value="RBINS Reference"/>
Level	<input type="text" value="species"/>
Status	<input type="text" value="valid"/>
Extinct	<input type="checkbox"/>
CITES	<input type="checkbox"/>
Sensitive info withheld	<input type="checkbox"/>
Parent taxon	<input type="text" value="Choose Parent"/>

# Taxonomy

Search Taxonomy ?

## Taxonomic unit Search

Use the character \* for a "containing" search (eg: \*falco)

<b>Name</b> <input type="text"/>	<b>Level</b> All	<b>CITES</b> <input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes or No	<b>Status</b> ALL
<b>Collection</b> Choose Collection	<b>Taxonomy</b> All	<b>Ig number</b> <input type="text"/>	<input type="button" value="Search"/>



## Taxonomy backbones

- GBIF
- WoRMS
- Fishbase
- Molluscabase
- Avibase
- COL
- Species.be
- IPNI

Check taxonomy with GBIF, Worms, ...



The search is case sensitive. Use appropriate Upper and lower cases.

Rank:  
order

Name:



## Taxonomy backbones

- GBIF
- WoRMS
- Fishbase
- Molluscabase
- Avibase
- COL
- Species.be
- IPNI

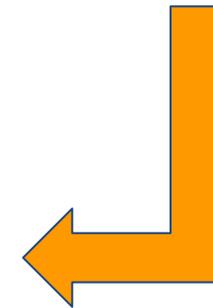
Check taxonomy with GBIF, Worms, ...



The search is case sensitive. Use appropriate Upper and lower cases.

Rank:  
order

Name:



# GBIF checker

List taxa

Download as tab-delimited

Download as HTML Table (microdata)

[Check all](#)

[Uncheck all](#)

- Parent:

GBIF key : [798](#)

Name : Primates

Status : ACCEPTED

Synonym : false

- 1

GBIF identifier: [3239541](#)

Adapidae

Rank: FAMILY

Status: ACCEPTED

Synonym : undefined

- 2

GBIF identifier: [4827056](#)

Afrotarsiidae

Rank: FAMILY

Status: ACCEPTED

Synonym : undefined

- 3

GBIF identifier: [4827506](#)

Amphipithecidae

Rank: FAMILY

Status: ACCEPTED

Synonym : undefined

# DarWIN : Locations



## Location

Search a Location

0	Date : <input type="text" value="From : 30/9/1904"/> ( 1 Value(s))		
	<b>Country - Administrative Area</b> <input type="text" value="Belgium"/>		
	<b>Farm - Historical</b> <input type="text" value="Billighouthoeve"/>		
	<b>Hameau - Populated Places</b> <input type="text" value="Breisem"/>	50.840281265166	4.8914927252995
	<b>Populated Place - Populated Places</b> <input type="text" value="Kumtich"/>		
	<b>Province - Administrative Area</b> <input type="text" value="Vlaams-Brabant"/>		
0	<b>Administrative Division - Administrative Area</b> <input type="text" value="Ostende"/>		
	<b>Country - Administrative Area</b> <input type="text" value="Belgium"/>		
	<b>Populated Place - Populated Places</b> <input type="text" value="Oostende"/> <input type="text" value="Ostend"/> <input type="text" value="Ostende"/>	51.13	2.55
	<input type="text" value="general comments : Estran à l'Est du chenal"/>		
	<input type="text" value="latitude - : 51.13-51.13"/> <input type="text" value="longitude - : 2.55-2.55"/>		
0	Date : <input type="text" value="From : 1/10/1947"/> ( 1 Value(s))		
	<b>Country - Administrative Area</b> <input type="text" value="Belgie"/>		
	<b>Sea - Hydrographic</b> <input type="text" value="Noordzee"/>	51.383333333333	3.0236111111111
	Date : <input type="text" value="From : 20/8/1908"/> ( 1 Value(s))		

[Acquisition](#)  
[Bibliography](#)  
[Chronostratigraphy](#)  
[Codes](#)  
[Collecting method](#)  
[Collecting tools](#)  
[Collection](#)  
[Collectors](#)  
[Comments](#)  
[Complete](#)

[Container](#)  
[Count](#)  
[Donators or Sellers](#)  
[Expedition](#)  
[External Links](#)  
[Historic](#)  
[I.G. number](#)  
[Identifications](#)  
[Insurances](#)  
[Lithology](#)

[Lithostratigraphy](#)  
[Loans](#)  
[Localisation](#)  
[MIDS level](#)  
[Maintenance](#)  
[Mineralogy](#)  
[Nagoya](#)  
[Part](#)  
[Properties](#)  
[Related Files](#)

[Relationships](#)  
[Rock form](#)  
[Sampling location](#)  
[Sex](#)  
[Social Status](#)  
[Stage](#)  
[Suggestions / Report problem](#)  
[Taxonomy](#)  
[Type](#)

Longitude -153.433333  
 Date from 01/01/0001 00:00:00

Codes	
Category	Code
main	BE-RBINS-VZ-Aves - 178
Original and stable id	1175781
UUID	6372436b-f13f-452d-98ad-d7e02ff97841

View Specimen

Collection								
<a href="#">BE-RBINS Vertebrates/Aves/Aves Types</a>								
I.G. number								
3750								
MIDS level								
Mids level : 1								
Codes								
<table border="1"> <thead> <tr> <th>Category</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>main</td> <td>BE-RBINS-VZ-Aves - 178</td> </tr> <tr> <td>Original and stable id</td> <td>1175781</td> </tr> <tr> <td>UUID</td> <td>6372436b-f13f-452d-98ad-d7e02ff97841</td> </tr> </tbody> </table>	Category	Code	main	BE-RBINS-VZ-Aves - 178	Original and stable id	1175781	UUID	6372436b-f13f-452d-98ad-d7e02ff97841
Category	Code							
main	BE-RBINS-VZ-Aves - 178							
Original and stable id	1175781							
UUID	6372436b-f13f-452d-98ad-d7e02ff97841							
Taxonomy								
<a href="#">Passerculus anthinus Bonaparte, 1853</a>								
Taxonomy: RBINS Reference								
Type								
specimen								
Complete								
Status Complete ? <span style="float: right;">Changed Register</span> Yes <span style="float: right;">Yes</span>								
Stage								
Stage <span style="float: right;">undefined</span>								
Sex								
Sex <span style="float: right;">undefined</span> State <span style="float: right;">not applicable</span>								

Sampling location	
Station visible ?	No
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Longitude	-153.433333
Date from	01/01/0001 00:00:00
Date to	31/12/2038 00:00:00
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© <a href="#">OpenStreetMap</a> contributors.	
Collectors	
Comments	
<div style="border: 1px solid #ccc; padding: 5px;"> <b>Notion : General</b> </div>	

# DarWIN : export specimens CSV



## My saved specimens

- ☆ [test export](#) (24 Items)
 2023-10-05 12:10:39
📄 ✖ Tab-delimited (specimens) ▼
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- ☆ [test hexapoda](#) (4 Items)
 2023-02-02 11:02:01
📄 ✖ Tab-delimited (specimens) ▼
Get report 📍
- ☆ [human embryos in darwin](#) (15 Items)
 2020-12-18 09:12:24
📄 ✖ Tab-delimited (specimens) ▼
Get report 📍

1	A	B	C	D	E	F	G	H	I	J	
id	specimen	coll	grscjcoll	collection_code	code	additional_codes	uujid	ig_num	taxon_name	author	full_scientific_name
2	753525	BE-RBINS-VZ-AVES-TYPES	3034	3034	329cd3a4-7247-4d51-b53a-c2644ca9804b	9270	Cyanocorax unicolor	du Bus, 1847	Cyanocorax unicolor du Bus, 1847		
3	753678	BE-RBINS-VZ-AVES-TYPES	3092	3092	79b8e4e5-f37c-4c72-83e2-fb0891100f93	9270	Cissilopha yucatanica	A. Dubois, 1875	Cissilopha yucatanica A. Dubois, 1875		
4	1193653	BE-RBINS-VZ-AVES-TYPES	-3024	3024	6e738f04-6dfb-4919-8d3d-5351783b6537	685	Gallirallus fuscus	du Bus de Gisignies, 1845	Gallirallus fuscus du Bus de Gisignies, 1845		
5	754009	BE-RBINS-VZ-AVES-TYPES	3036	3036	4a72f835-fe0c-4665-9aba-38e2e9d18a2e	9270	Cyanocorax violaceus	Du Bus, 1847	Cyanocorax violaceus Du Bus, 1847		
6	297005	BE-RBINS-VZ-AVES-TYPES	3156	3156	5f9e439a-0fc8-4516-9425-0a62c6cba362	11698	Phloeocastus melanoleucus erythrobuccalis	Verheyen, 1940	Phloeocastus melanoleucus erythrobuccalis Verheyen, 1940		
7	729069	BE-RBINS-VZ-AVES-TYPES	3100	3100	0ddfb0c09-d798-4fef-afc6-5ee755beaa48	5373	Myiagra azureocapilla	E.L. Layard, 1875	Myiagra azureocapilla E.L. Layard, 1875		
8	757589	BE-RBINS-VZ-AVES-TYPES	3007	3007	5e27a665-e938-464a-b600-8970bd8b4b1b	9270	Lamprolaima obscurus	Du Bus	Lamprolaima obscurus Du Bus		
9	735186	BE-RBINS-VZ-AVES-TYPES	3133	3133	ad615076-07b0-40b3-9ac1-55b831093435	5724	Zosterops basilanica	Steere, 1890	Zosterops basilanica Steere, 1890		
10	361773	BE-RBINS-VZ-AVES-TYPES	3015	3015	c190982f-62e0-4bd5-a83f-c1e6cae5d76b	1895	Leucotermis albicollis ghiesbreghtii	(du Bus de Gisignies, 1845)	Leucotermis albicollis ghiesbreghtii (du Bus de Gisignies, 1845)		
11	803382	BE-RBINS-VZ-AVES-TYPES	3057	3057	3622fc4b-ffa1-47e8-a57b-ef0a2e8bb4f28	3750	Sicalis aureipectus	Bonaparte, 1853	Sicalis aureipectus Bonaparte, 1853		
12	557016	BE-RBINS-VZ-AVES-TYPES	3049	3049	6451ea62-9a79-48b4-gage-811707c82f67	975	Prionites carinatus	Du Bus, 1847	Prionites carinatus Du Bus, 1847		
13	740910	BE-RBINS-VZ-AVES-TYPES	3054	3054	d8d29cd24-d45f-40fa-8319-abf79609e235	644	Lanius cephalomelus	Bonaparte, 1853	Lanius cephalomelus Bonaparte, 1853		
14	789768	BE-RBINS-VZ-AVES-TYPES	3019	3019	70476f7d-e6ea-4402-8c22-1636d72ab33c	9270	Calliste chrysotis	Du Bus 1847	Calliste chrysotis Du Bus 1847		
15	789191	BE-RBINS-VZ-AVES-TYPES	3070	3070	5af7d5a3-692a-44df-9e7c-e918fa4ab3bc	1846	Lanius auritus	Du bus 1855	Lanius auritus Du bus 1855		
16	773337	BE-RBINS-VZ-AVES-TYPES	3066	3066	af845f9-a3fb-4d67-84ac-1966cf8041f8	1821	Pyrenestes personatus	Du Bus, 1855	Pyrenestes personatus Du Bus, 1855		
17	790787	BE-RBINS-VZ-AVES-TYPES	3061	3061	7cfc2008-5eeb-4e7e-a593-d8e0aa225454	3750	Saltator plumbeus	Bonaparte, 1853	Saltator plumbeus Bonaparte, 1853		
18	770307	BE-RBINS-VZ-AVES-TYPES	3029	3029	5d92df7b-1455-404d-b266-b3de8b3cd188	9270	Vireolanius melitophrys	Du Bus, 1845	Vireolanius melitophrys Du Bus, 1845		
19	742463	BE-RBINS-VZ-AVES-TYPES	3128	3128	30b4caf6-e5e7-4ed7-a9a1-204a5f8d88ef	2400	Passer montanus malaccensis	Dubois, 1885	Passer montanus malaccensis Dubois, 1885		
20	361646	BE-RBINS-VZ-AVES-TYPES	3032	3032	19e4acce-acba-469c-9d8d-79787246bedc	162	Geranospiza caerulescens gracilis	(Temminck, 1821)	Geranospiza caerulescens gracilis (Temminck, 1821)		
21	627840	BE-RBINS-VZ-AVES-TYPES	3158	3158	3bce91af-6acb-4b3f-aaba-7b834e2966b0	9120	Troglodytes troglodytes occidentalis	R. Verheyen, 1941	Troglodytes troglodytes occidentalis R. Verheyen, 1941		
22	726461	BE-RBINS-VZ-AVES-TYPES	3011	3011	56ead5ef-ba79-4ebc-bfe7-aa1b0866673c	9812	Poecile montanus borealis	(Selys-Longchamps, 1843)	Poecile montanus borealis (Selys-Longchamps, 1843)		
23	487946	BE-RBINS-VZ-AVES-TYPES	3189	3189	de3cb6d6-f949-41df-877c-0f41d4938f19	28388	Otus moheliensis	Lafontaine & Moulaert, 1998	Otus moheliensis Lafontaine & Moulaert, 1998		
24	635250	BE-RBINS-VZ-AVES-TYPES	3030	3030	946b9197-b931-459f-bd35-c07382eaf322	1546	Turdus fulviventris	Sclater, PL, 1858	Turdus fulviventris Sclater, PL, 1858		
25	679507	BE-RBINS-VZ-AVES-TYPES	3085	3085	cf76a62c-b7f7-479a-9f42-63df87d81ace	3276	Oroaetus isidori	(Des Murs, 1845)	Oroaetus isidori (Des Murs, 1845)		
26	624250	BE-RBINS-VZ-AVES-TYPES	3132	3132	12935d73-d075-4cd5-bfd8-4956b2d9cb6b	5724	Pycnonotus urostictus basilanicus	(Steere, 1890)	Pycnonotus urostictus basilanicus (Steere, 1890)		
27	626033	BE-RBINS-VZ-AVES-TYPES	3180	3180	513de077-b7c7-4722-a0ed-0f106aa7e0d9	19062	Pyrrhurus scandens scandens	(Swainson, 1837)	Pyrrhurus scandens scandens (Swainson, 1837)		
28	432175	BE-RBINS-VZ-AVES-TYPES	3052	3052	550927ac-9de3-4b20-9c51-edb379efc553	1126	Hieraaetus spilogaster	(Bonaparte, 1850)	Hieraaetus spilogaster (Bonaparte, 1850)		
29	742423	BE-RBINS-VZ-AVES-TYPES	3127	3127	b1e8e762-egcf-4e23-a2cc-c35c63b46980	2400	Passer montanus malaccensis	Dubois, 1885	Passer montanus malaccensis Dubois, 1885		
30	746947	BE-RBINS-VZ-AVES-TYPES	3181	3181	25746dc0-De2f-44a6-914d-a8d2ec94bb26	10962	Textor velatus upembae	Verheyen, 1953	Textor velatus upembae Verheyen, 1953		
31	800991	BE-RBINS-VZ-AVES-TYPES	3142	3142	8a3d69b4-09e1-4444-995b-7e60b48e2dc1	9270	Quzoborus torridus major	A.Dubois, 1894	Quzoborus torridus major A.Dubois, 1894		
32	544238	BE-RBINS-VZ-AVES-TYPES	3191	3191	a33778f8-c538-4661-a2d7-552a316bd7c4	28567	Otus moheliensis	Lafontaine & Moulaert, 1998	Otus moheliensis Lafontaine & Moulaert, 1998		
33	803525	BE-RBINS-VZ-AVES-TYPES	3137	3137	143835db-9fac-4b77-b053-3a75d2f02f3	3750	Spermophila ardesiacea	A.Dubois, 1894	Spermophila ardesiacea A.Dubois, 1894		
34	1081487	BE-RBINS-VZ-AVES-TYPES	3144	3144	545bcf61-4386-43c5-9e90-a01b46fabc6f	9270	Dinopium javanense borneonense	(Dubois, A.J.C. 1897)	Dinopium javanense borneonense (Dubois, A.J.C. 1897)		
35	802654	BE-RBINS-VZ-AVES-TYPES	3059	3059	a3367a1b-c150-4294-9c43-34e644b57e34	3750	Passerculus geospizopsis	Bonaparte 1853	Passerculus geospizopsis Bonaparte 1853		

# DarWIN : import specimens CSV



	A	B	C	D	E	F
1	phylum	class	order	family	genus	species
2	CHORDATA	ACTINOPTERYGII	SILURIFORMES	Clariidae	Tanganikallabes	Tanganikallabes alboperca Wright & Bailey,2012
3	CHORDATA	ACTINOPTERYGII	SILURIFORMES	Clariidae	Tanganikallabes	
4	CHORDATA	ACTINOPTERYGII	SILURIFORMES	Clariidae	Tanganikallabes	Tanganikallabes mortiauxi Poll,1943
5	CHORDATA	ACTINOPTERYGII	SILURIFORMES	Mochokidae	Synodontis	
6	CHORDATA	ACTINOPTERYGII	SYNBRANCHIFORMES	Mastacembelidae	Mastacembelus	Mastacembelus tanganicae (Günther,1893)
7	CHORDATA	ACTINOPTERYGII	SILURIFORMES	Claroteidae	Lophiobagrus	Lophiobagrus cyclurus (Worthington & Ricardo,1936)
8	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Neolamprologus	Neolamprologus toae (Poll,1949)
9	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Aulonocranus	Aulonocranus dewindti (Boulenger,1899)
10	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Chalinochromis	Chalinochromis brichardi Poll,1974
11	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Cyprichromis	
12	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Eretmodus	
13	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Neolamprologus	Neolamprologus fasciatus (Boulenger,1898)
14	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Neolamprologus	Neolamprologus tretocephalus (Boulenger,1899)
15	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Neolamprologus	Neolamprologus toae (Poll,1949)
16	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Neolamprologus	Neolamprologus niger (Poll,1956)
17	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Neolamprologus	Neolamprologus niger (Poll,1956)
18	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Telmatochromis	Telmatochromis bifrenatus Myers,1936
19	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Telmatochromis	Telmatochromis dhonti (Boulenger,1919)
20	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Pseudosimochromis	Pseudosimochromis curvifrons (Poll,1942)
21	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Petrochromis	Petrochromis fasciolatus Boulenger,1914
22	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Petrochromis	
23	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Ophthalmotilapia	Ophthalmotilapia nasuta (Poll & Matthes,1962)
24	CHORDATA	ACTINOPTERYGII	PERCIFORMES	Cichlidae	Aulonocranus	Aulonocranus dewindti (Boulenger,1899)

• 1.  
Taxonomy



• 2. Localities



• 3.  
Specimens

• XLS /CSV  
Template



• Webservices  
Validation  
Taxonomy  
Geonames



• Human  
Quality  
control



• Import

# DarWIN : Bibliography



**Bibliography** X

**Year :**2013  
**Title :**History of excavations, discoveries and collections  
**URI :** <https://biblio.naturalsciences.be/library-1/rbins-staff-publications/articlereference.2014-01-01.2942734613>

## View Bibliography

Edit :

<b>Type</b>	Article
<b>Title</b>	History of excavations, discoveries and collections
<b>Bibliographical reference</b>	Semal P., Hauzeur A., Toussaint M., Jungels C., Pirson S., Cammaert L. & Pirson P., 2013. History of excavations, discoveries and collections. Anthropologica et Præhistorica, 123/2012:13-39.
<b>Year</b>	2013
<b>Abstract</b>	Spy cave, also known as the Betche aux Rotches cave, is one of the most famous Palaeolithic sites in Belgium. Excavated on numerous occasions beginning in 1879, the remains of two adult Neandertals were discovered in 1886. For the first time in the history of palaeoanthropology, human fossils were found in a stratigraphic context associated with rich archaeological material including the remains of extinct megafauna. The history of work at Spy presented here is based on a review of publications concerning the various excavations, the Lohest and Vercheval-De Puydt family archives, as well as inventories and archives possessed by the Royal Belgian Institute of Natural Sciences and the Royal Museums of Art and History. This archival review clarifies several aspects concerning the discovery of the two Neandertal specimens, particularly in light of new studies concerning the Spy material which is now dispersed amongst several public and private collections.
<b>URI</b>	URL <a href="https://biblio.naturalsciences.be/library-1/rbins-staff-publications/articlereference.2014-01-01.2942734613">https://biblio.naturalsciences.be/library-1/rbins-staff-publications/articlereference.2014-01-01.2942734613</a>
<b>Related specimens</b>	

**Authors**

[Semal Patrick \(Dr.\)](#)

**External Links** X

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	PDF

# DarWIN : Bibliography external link



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## Spy cave

by Semal Admin — last modified Nov 25, 2021 09:55 AM — [History](#)

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Bibliography items	Publication date
<input type="checkbox"/> Devière T., Abrams G., Hajdinjak M., Pirson S., De Groote I., Di Modica K., Toussaint M., Fischer V., Comeskey D., Spindler L., Meyer M., Semal P. & Higham T., 2021. <a href="#">Reply to Van Peer: Direct radiocarbon dating and ancient genomic analysis reveal the true age of the Neanderthals at Spy Cave</a> Proceedings of the National Academy of Sciences, 118(26):e2107116118.	2021
<input type="checkbox"/> Chevalier A. & Goffette Q., 2015. <a href="#">Madame est servie! Un parcours archéologique de l'alimentation en Belgique au travers des âges. De l'Homme de Spy à Ambiorix: une cuisine préhistorique de terroir alliant salade de pousse de nénuphar aux crumble pomme-noisette.</a> In: Cours-conférence du Collège Belgique, Académie royale de Belgique, Bruxelles, 23/09/2015.	2015
<input type="checkbox"/> Devière T., Abrams G., Hajdinjak M., Pirson S., De Groote I., Di Modica K., Toussaint M., Fischer V., Comeskey D., Spindler L., Meyer M., Semal P. & Higham T., 2021. <a href="#">Reevaluating the timing of Neanderthal disappearance in Northwest Europe</a> Proceedings of the National Academy of Sciences, 118(12):e2022466118.	2021
<input checked="" type="checkbox"/> Jadin I. & Hauzeur A., 2002. <a href="#">Catalog. Catalogue. 1. Hassnoerelementen. Spy &amp; Chaleux (Namur, België). Éléments du [de] parure. Spy &amp; Chaleux (Namur, Belgique) Schone Schijn. Brilliance et Prestige. Romeinse juweelkunst in West-Europa. La joaillerie romaine en Europe occidentale, 2002:137 (+ 15, fig. 1).</a>	2002
<input type="checkbox"/> Devière T., Abrams G., Di Modica K., Comeskey D., De Groote I., Semal P. & Higham T., 2019. <a href="#">Dating the latest appearance of Neanderthals in Belgium</a> In: Proceedings of the European Society for the study of Human Evolution, vol. 8, pp. 51, European Society for the study of Human Evolution, Liège, Belgium.	2019
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