

Data **R**esearch **W**arehouse **I**nformation **N**etwork: A *DaRWIN 2.0 manual for beginners*

1. Introduction

The DaRWIN 2.0 application is a tool for managing scientific collections. This version has been made available thanks to the efforts of the RBINS development team (Brice Maron, Paul-André Duchesne and Yann Chambert).

The application enables the user to keep a catalogue of the collection pieces, as well as keeping track of the day-to-day curation of these pieces.

This manual will help you, the encoder or collection manager, to find your way around DaRWIN 2.0

Screen shots will show you step by step around the application in order for you to get used to all DaRWIN functionalities offered so far.

Have fun on your discovery trip!

Cathy Emery

Tabel of content

1. Introduction.	<u>2</u>
2. How to open and log into the application	4
3. What do you use the dashboard for	<u>6</u>
3.1 How to use the widgets.	<u>6</u>
4 How to edit your preferences	<u>7</u>
4.1 How to customise the widgets to the user's taste	
4.2 How to change your profile	<u>8</u>
4.3 How to edit your preferences for the 'specimen search' result scr	<u>een11</u>
4.4 How to set the preferences for your 'Saved specimens list'	12
4.5 How to set the preferences for your 'Saved search'	
5. How to use the Search menu	<u>16</u>
5.1 Collections.	17
5.2 Catalogues.	
5.2.1 Catalogue without dates	
5.2.2 Catalogue with dates.	20
5.2.3 Catalogue sampling locations (GTU's)	21
5.2.3.1 Search via tags.	21
5.2.3.2 Search via Latitudes and Longitudes	22
5.3 Specimen Search.	
6. How to use the Add menu.	28
6.1 Collections (for collection managers only)	28
6.2 Add Catalogue items.	
6.3 Add Specimens	34
6.3.1 Add a Specimen scope (batch level)	34
6.3.2 Add Individual scope	
6.3.3 Add Object scope.	
7. How to use the Administration menu.	40
7.1 Pinned items.	40
7.2 Mass actions.	
7.3 Users (for Collection managers only)	
Annexe 1: Overview of used icons.	
Annexe 2: Glossary.	44
Annexe 3: Example of a Lithostratigraphical unit.	46



2. How to open and log into the application

You first have to open your Firefox or Google Chrome browser and you then have to click on your 'bookmarks'. (the bookmark where you stored the URL http://darwin.naturalsciences.be)



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 1946, 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 is the main gate to glimpse the extent and diversity of the collections. Today, the darwin database manages information on about 350.000 specimens stored in the institute's depositories. This number rises on a daily basis thanks to the continued efforts of 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 and Entomology. The application will soon be expanded with paleontological data.

Information on the Anthropological collection is maintained on a parallel system: mars (Multimedia Archaeological Research System). This data can be consulted following 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.sciencesnaturelles.be/institute/structure/geology/gsb_website And www.mumm.ac.be

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 of the status specifications not treated by the ICZN regulations (eg. topotype) have been maintained as supplementary information about the specimen(s) in question.

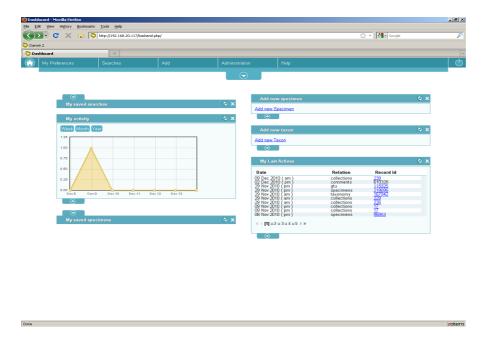
Enjoy your virtual visit through our collections!

The above figure shows you the login screen where you have to enter your user name and password.

<u>Attention</u>: When entering the wrong user name or password the following error message will appear.

Bad login or password

When logging in correctly, your dashboard page will appear.



Another general piece of advice: By keeping the CONTROL (CTRL) button pressed down when opening a menu item, your action will be opened in a new tab. This way you can work in several different windows at a time.

3. What do you use the dashboard for

This page is actually your homepage within the application.



From this page, you can easily navigate to a number of standard menus:

- Adding a specimen
- Adding a taxon
- Viewing your 'saved searches'
- Viewing your 'saved specimens'
- Viewing your own statistics

But before going into more detail, you will be familiarised with the way the widgets behave on your homepage.

<u>Remark</u>: You can log out at any time by clicking on



3.1 How to use the widgets

The first time you log into the application, all widgets will be available on your screen.

By clicking on the arrows, you can either open



or close



each widget.

When clicking on the cross at the top right of the widget, you can place it in your 'Customise your interface' area at the top of the screen:



To reactivate the widget in your *dashboard* area, you simple need to click on it within the blue area on top.

When all widgets are displayed in your main working area, the following message appears in the customise area:



You can drag and drop the widgets in order to place them in a customised order in your working area.



4 How to edit your preferences

4.1 How to customise the widgets to the user's taste

You can customise your widgets further by using the following menu item:



This menu allows you to change the standards settings of your widgets:



You will find the widgets to be grouped by screen. In this example you can view the state of the widgets on your *dashboard* screen.

Deactivated: the widget does not appear on the screen (this state can only be set by collection managers)

Activated: the widget is available, yet hidden in your 'Customise your interface' area at the top of the screen.

Visible: the widget is visible in your main working area, but the widget is closed *Opened*: the widget is visible in your main working area and is open.

savedSpecimens

The *Custom title* allows you to personalise the title of each widget.

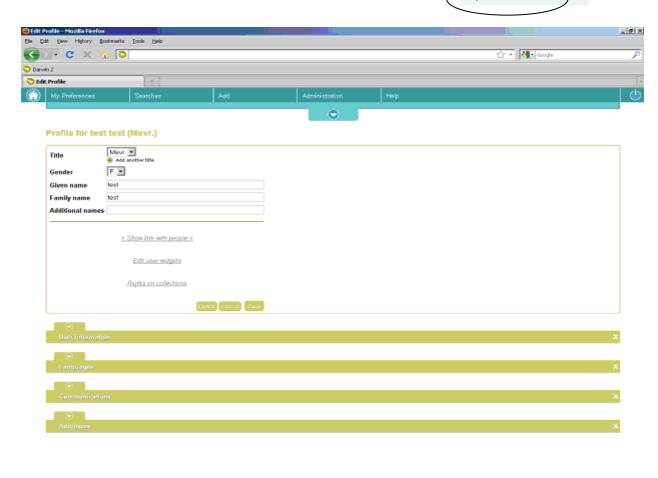
Do not forget to save your new preferences by clicking on the Save button!

4.2 How to change your profile

You can open the desired screen by clicking on the following menu

My Preferences

My Profile



The fixed area at the top of the screen contains your main personal infos.

A user is not always present in the 'people catalogue'. Should you wish to link the information found in the people catalogue with your user name, you will simply need to click on the Show link with people">Show link with people option. Of course, a corresponding 'people record' needs to be present in order to link the user info to it.

The link > <u>Edit your widgets</u> < will open the 'My widgets' screen where you can customise your widgets further as we have seen in the previous pages.

The link > *Rights on collections* < will open the '*List of rights in collections*' window where you can consult the collections to which you have a type of access.

Finally, 4 additional widgets are available for adding more information to your profile: Communications; Languages; User Information and Addresses

Communications



This widget can be used to add the type of communication means you prefer, phone/fax and/or email. Depending on the type of communication means selected, a couple of tag can be added to your entry.

It is possible to add more than one type of communication means per profile.



Languages



In this widget you can indicate what languages you speak and whether a languages is your native tongue or preferred language.

In case the interface exists in your *preferred language*, the system will automatically translate all field labels and titles

If you do not indicate your preferred language or the translation is not yet available, the system will show all field labels and titles by default in English.

At present, the application only exists in English, Dutch and French.

All other languages entered in this widget are for information purposes only and can be actively used by other correspondents when contacted outside of the application.

User Information



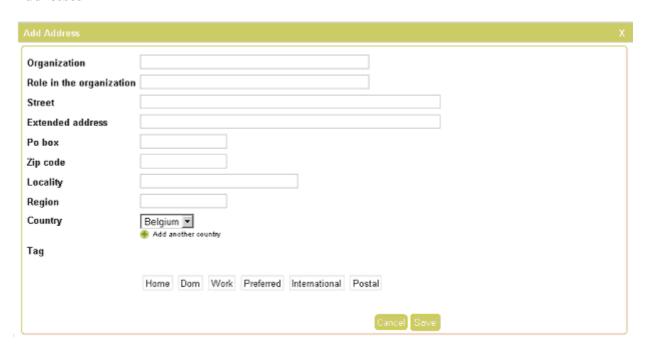
This widget is used to personalise your password. You simply need to click on the word *local* to access the information stored in the widget.

You have to introduce the same password twice and by clicking on save you can easily change it.



A user name cannot be edited. Should you wish to change it, we recommend you contact your system administrator.

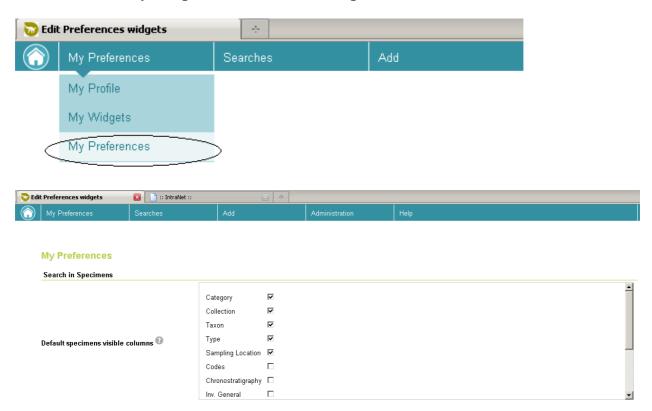
Addresses



This widget allows you to enter one or more addresses.

Per address, you can again associate one or more tags.

4.3 How to edit your preferences for the 'specimen search' result screen

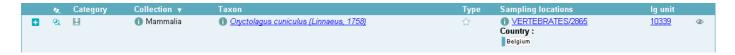


This screen allows you to pre-set the field that you always want to appear on the result screen after having performed a specimen search. You will have to pre-set the field per level, however: specimen, individual or object level.

This does not prevent you from adding or removing other available fields in the result screen for the duration of your session. Let's look at a practical example: Imagine that you have set your default preferences as describe in the above screen shot (Category, Collection, Taxon, Type and Sampling location) After having performed a search on the Taxon *Oryctolagus*, you will get the following result:



You can now decide to add the IG number by selecting it from the *slider* on top of your screen. The following result will appear on screen:



As soon as you log off, your session will be closed. As a consequence, you will get the first screen shot above the next time you revisit the application and look for a taxon. (So no IG number will appear by default).

As mentioned before, the 'my preferences' screen allows you to pre-set your default field choices on the three existing levels (specimens, individuals and objects)

Other options on this screen, have to do with the number of 'saved searches' and 'saved specimens' that will be visible in the corresponding widgets on your dashboard screen. You can set the maximum number to 20 different 'searches' or 'specimen lists' before the widget will add arrows in which you will need to navigate in order to see more.

Finally, you can indicate whether or not you would like to view the help icons throughout the application. You will get info on each item by hovering over the icon.

4.4 How to set the preferences for your 'Saved specimens list'



A 'saved specimen' list consists of specimens, individuals or objects that you have selected and placed in a private area in the application. Other users will not be able to consult your lists. By clicking on the title of a list, you can view the static content of the list. You can add or remove records from the list if you wish, but you will have to do so manually.

When opening this menu item, you will be directed to a page where you can perform the following actions:

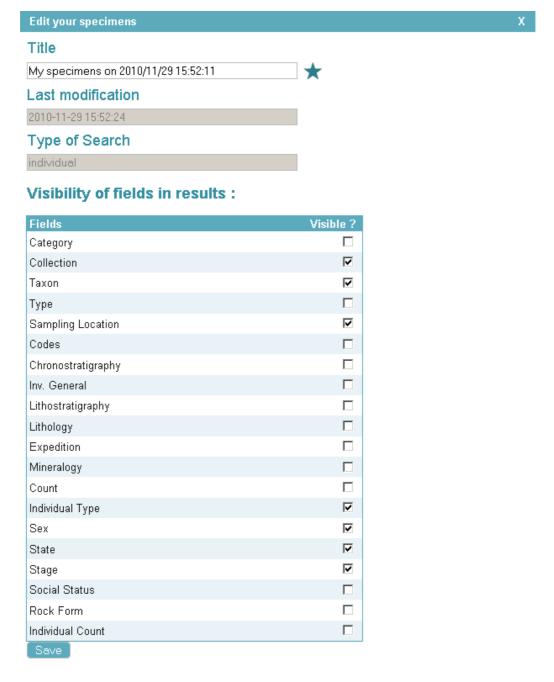
- You can activate the star to indicate that the list is a favourite of yours
- You can click on the name of a list in order to open it
- You can click on the red cross to delete a list (of course no information in the database will be deleted, only your selection is removed)
- You can click on the edit icon to reset your default settings for the list

My saved specimens



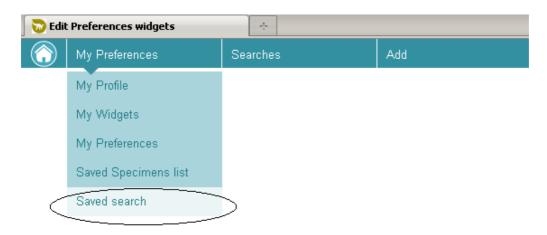
The default settings that you can edit are:

- The title of your particular 'saved specimen' list
- The fields that you want to appear by default every time you open the list



Just as with any other 'specimen search' you can add or remove other fields by using the *slider* on top of the screen once the list has been opened.

4.5 How to set the preferences for your 'Saved search'



A 'saved search' list consists of search criteria for specimens, individuals or objects that you have selected and placed in a private area in the application. Other users will not be able to consult your lists. By clicking on the title of a list, you can view the dynamic content of the list. When you click on a list, it is the underlying query that will be performed and you will get the result of your query on screen. Should records have been removed or added at the time you run the query, then the result will automatically reflect this.

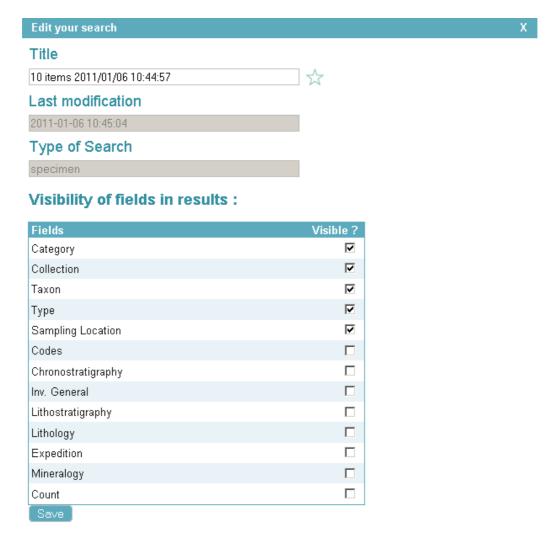
When opening this menu item, you will be directed to a page where you can perform the following actions:

- You can activate the star to indicate that the list is a favourite of yours
- You can click on the name of a list in order to view the result of your query
- You can click on the red cross to delete a list (of course no information in the database will be deleted, only your selection criteria are removed)
- You can click on the edit icon to reset your default settings for the list



The default settings that you can edit are:

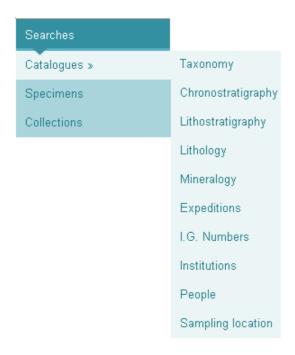
- The title of your particular 'saved search' list
- The fields that you want to appear by default every time you open the result of your query



Just as with any other 'specimen search' you can add or remove other fields by using the *slider* on top of the screen once the list has been opened.

5. How to use the Search menu

When you open this menu a tree structure menu appears in which all catalogues are listed. The menu is divided in three parts: the common catalogues, the Specimens' search and the Collections.



The blue colour indicates that you are performing a search. A blue specimen file indicates that you can view the data but that you are unable to edit or delete it.

Be aware that as an encoder or a collection manager you are able to change data in any catalogue regardless of your access rights! When the following warning appears on top of your screen, extra attention should be given to changes:

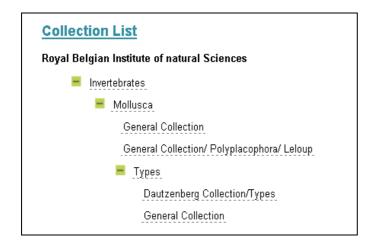
Warning!

This unit is used in specimens where you do not have encoding rights. Be sure of what you do!

Although you can change the data, you should first contact your fellow encoders or the collection managers involved before editing something that will affect all other users!

Let's have a look at these menu items, starting with the Collections

5.1 Collections



The *Collections search* will open a tree structured page where you can consult the collections and the way they are set-up. By clicking on the plus icon, you can view the underlying sub collections as well.

On the top level you will see the institution name that holds these collections. In the above example the sub collection '*Types*' has been placed at the same level as the sub collection 'General Collection'. Both sub collections belong to the collection 'Mollusca'.



The advantage of this type of matroschka-system is that the users can been given access to your collections in a very granular way. It is no secret, though, that it is better to keep the number of sub collection levels to a certain minimum as users may get lost in a too complicated structure.

<u>Remark:</u> Only collection managers and system administrators can create and/or edit collections. To open a record and place it into edit mode, you simply need to click the pencil like icon



5.2 Catalogues

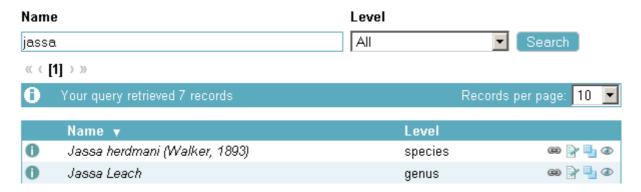
In general, the catalogues can be divided into two types:

Without dates and with dates.

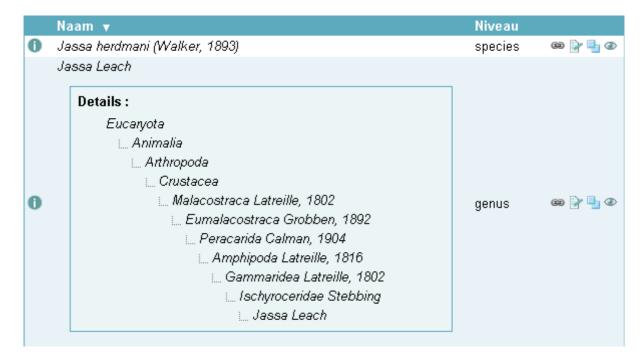
5.2.1 Catalogue without dates

The search screen without dates offers you the possibility to search on one or more fields. The results will be shown in a tabular format:

Taxonomic unit Search



<u>Remark</u>: Every time you see the icon _____, you will be able to view extra information. In the above example you will see the taxonomical hierarchy:



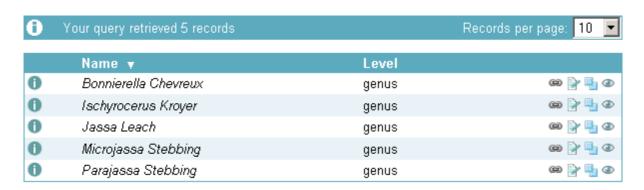
The catalogues Taxonomy, Chronostratigraphy, Lithostratigraphy, Lithology and Mineralogy will offer you an additional related search via the following icon (50)

Let's have a look at a detailed taxonomical example:

You first look up the family *Ischyroceridae Stebbing* via a regular search. Next you click on the related search icon which will select this family in the search area of your screen.

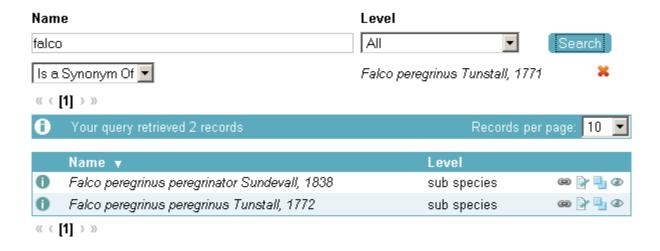


If you now select 'Is a direct Child' from the drop down menu and perform a search, the result will show you all known genuses for this family already entered in the catalogue.



In the same manner, you could look for synonyms related to a certain taxon. Let's have a look at a fictitious example: Here you would look for all synonyms related to the taxon *Falco Peregrinus Tunstall* that start with Falco:

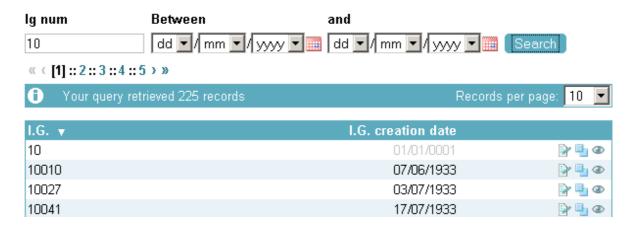
Taxonomic unit Search



5.2.2 Catalogue with dates

The search screen with dates actually works in the same fashion as the other catalogues without. The results are shown in the same way on screen as well.

General Inventory Numbers Search



What you will notice from above screen shot, however, is that the precise dates are shown in black, whilst the unknown dates are shown in gray.

<u>Remark</u>: When you enter a unknown part of the date in the search area of your screen, the system will always take into account day '01' and/ or month'01'. For the second date the system will use day '29', '30' or '31' depending on the selected month. Should you leave the month blank as well, then the system will automatically choose month '12'.

5.2.3 Catalogue sampling locations (GTU's)

As was the case in the first type of catalogues, you are able to look up a sampling location by typing it's name and/or code in the corresponding text fields. You can also look up sampling locations via the collecting date(s).

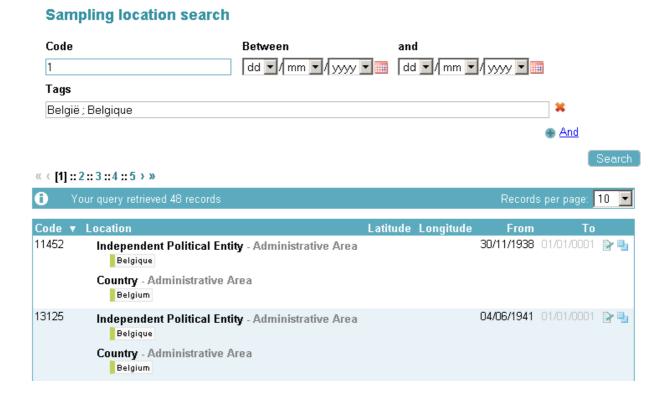


This particular catalogue offers two additional ways of finding information that you can use separately or in combination.

5.2.3.1 Search via tags

Some of you may be familiar with the textual tags that you can find underneath a picture in image management site such as Picasa. The tags are a kind of sticky notes that you can add to a photo and by which you can find all pictures that have the same sticky note attached to it. Well, the GTU's have a very similar functionality.

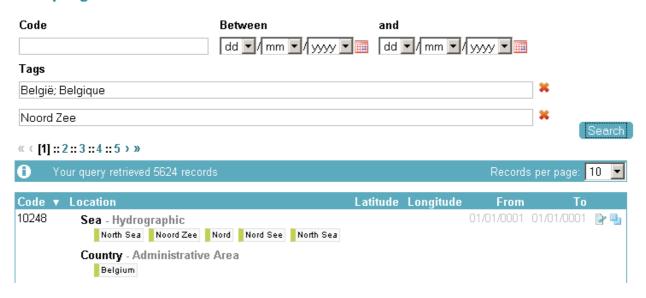
You can, e.g., find all sampling locations that have a *tag* 'België'. But what happens if the GTU was entered with the *tag* 'Belgique' instead? By entering the following in the *tags* field 'België; Belgique' you easily resolve this issue. The query will now return all GTU's that either contain a tag 'België' or 'Belgique'.



Now imagine that you want to perform an even more detailed search. You actually want to find all GTU's that are positioned in the 'Noordzee' (=North sea) along the Belgian Coast.

We can still use the previous tag criteria 'België; Belgique' and now we click on AND to add another *tags* line. In the second text field, we now enter the word 'Noordzee'. All records that will now be shown, will belong to 'België' or 'Belgique' and will have the *tag* 'Noordzee' associate as well.

Sampling location search



When entering a word in the *tag* text field, you may sometimes see a couple of suggestions appear underneath that field. When the words are preceded by a green line, the suggestion has already been linked directly to the word you want to look up in a GTU within the database. For instance: When entering the word 'België', the words 'Belgium' and 'Belgique' will appear. This means that there is at least one GTU where the combination "België; Belgique; Belgium' has been entered. You can easily select the suggestions on screen by clicking them.



If the suggestions are preceded by a gray line, the database simply gives you 'sounds like' suggestions. These tags have not yet been associated within one GTU.



5.2.3.2 Search via Latitudes and Longitudes

For those GTU's that have associate latitudes and longitude values, you can also use the additional 'lat long' search criterion. You can fill in a range of latitudes and longitudes manually in the corresponding fields.

Sampling location search

VERTEBRATES/27826



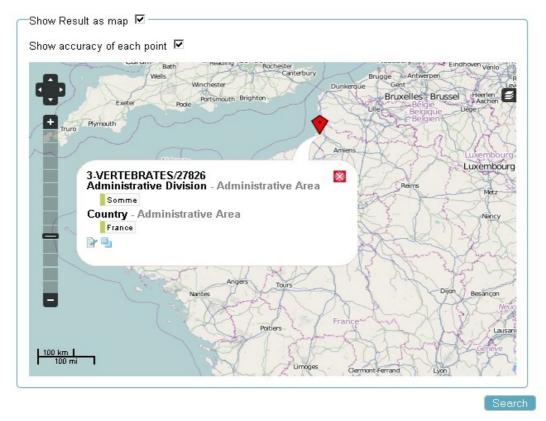
<u>Remark:</u> The latitudes en longitudes must, however, follow the corresponding format in 'Decimals' 000.000000

Administrative Division - Administrative Area

Country - Administrative Area

France

Are you not sure of the values, then a search performed on a google map may help you out. You first have to select a range on the map by zooming in or out. Once the required area is visible within the rectangle, you simply click on 'search'. You will now see a number of red icons appear on the screen. When clicking on an icon, the code and name of the sampling location will appear, as well as the associated tags. If you want to view the while record, you will have to click on the edit icon underneath the data.



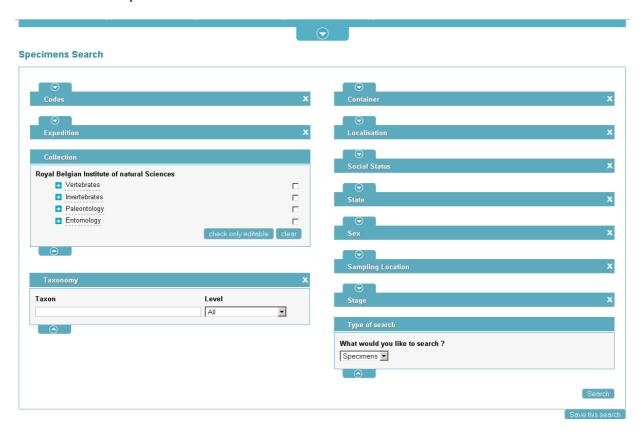
25/11/1936 31/12/2038 😭 🛂

50.183333 1.6333333

5.3 Specimen Search

Searching for specimens has a slightly different approach then the simple search criterion within the catalogues.

This screen will be more similar to the way your *dashboard* works, as each search criterion is shown in a separate widget. As on your *dashboard*, you are able to close, move or hide the widgets behind your *slider* on top of the page. You can, naturally, combine one or more widgets in one search if required.



Let's have a look at some of the available widgets.

Collection widget



This widget will show you all public accessible collections, as well as the private ones to which you have the read-only rights. When clicking the box next to a higher level collection, the system will automatically select the lower sub collections beneath. You can, of course, just select just 1 sub collection if you want. If the aim is to search in collections where you can edit the info, then you can click on the widget button below 'Check only editable'. You might have noticed that you cannot close this widget. This is a search criterion which will always be taken into account when running a query. If no boxes are ticked, the system will perform a search on all collections.

Type of search widget

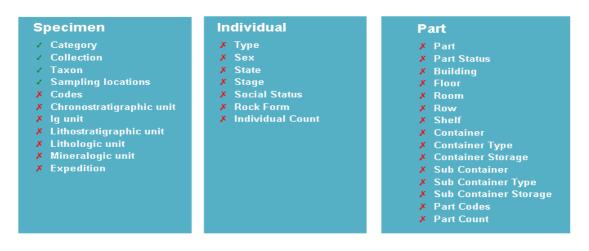


In this screen shot, you can see the second search criterion that is always taken into account when running a query. You can choose to run a query on three different levels: specimens (batches), individuals, objects.

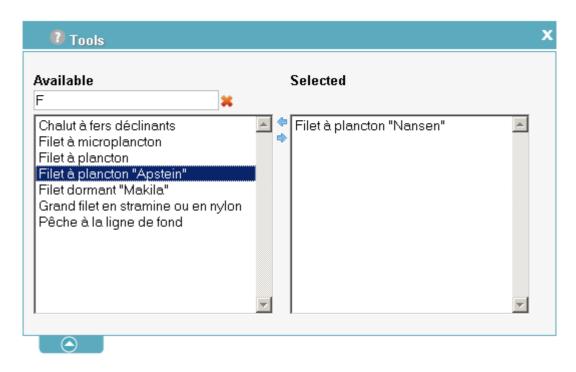
When choosing a higher level, the information of the lower level, if any, will be also available.



Some result fields will only be selectable, though, when running the query on the corresponding level.



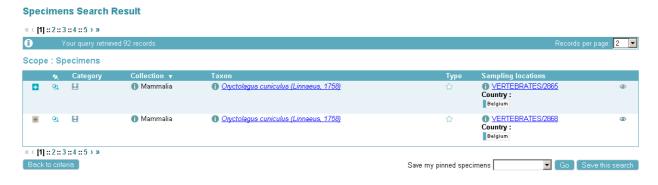
Tools widget



This widget allows you to search for specimens using one or more collecting tools. You can use the field *Available* on top to pre filter the list below. Next you can select one or more tools in the list (by using the shift or control buttons) and you simply select your choice by then clicking on the arrow to the right. When running the query, the system will only take into account the tools selected in the left column *Selected*.

The Methods widget works in exactly the same fashion.

Let's have a look at the possibilities in the result screen: Here we see a possible result on the Specimen (batch) level for the taxon related to a Rabbit:



The result page will indicate on which level we ran a query via the scope information. Here we obviously ran the query on the highest level (specimens); We can see that this query returned a total number of 92 records and that 2 records are shown per page. You can navigate from page to page by clicking the page numbers or arrows. You can see that the plus icon on the first record is blue and this indicates that there is lower level information available. The lower level information is viewable only and cannot be altered on this screen. The visitor can open the file in read-only by clicking the eye icon on the right.

As mentioned before, you can add or remove widgets via the slider on top of the page.

See also: How to edit your preferences for the 'specimen search' result screen p.12

Via the Back to criteria button you can view your previous search criteria and change them if required.

If you wish to save your search criterion for later use, then you can do this by clicking on the Save this search button.

Finally, you can select one or more records by clicking on the pins icon next to the desired record(s) in the result screen.



These records will automatically be places in the **pinned items** menu for the duration of your session.

Should you wish to consult these records in a later session, then you will have to save the specimens or the criteria in your *dashboard* options. You will then simply need to add the records in a **new list** or add them to an **existing list**. The list will be saved as soon as you click on the Go button.

You can click the titles in the title bar in order to show the result in alphabetical order (ascending or descending).

For instance ·

the Type v button will show you all allotypes first if your selected the individuals scope.

6. How to use the Add menu

When you open this menu, you will see a menu that is very similar to the search menu structure. The menu is again divided in three parts: general catalogues, Specimens and Collections.

The first thing that you will notice is that all screens are shown in green. The green colour indicates that you can enter or edit data. Let's have a look at the menu's, as in the previous chapters...

6.1 Collections (for collection managers only)

New Collection	<u>on</u>
Code	
Name	
Institution	- Choose !
Collection type	mix •
Main manager	- Choose I
Parent collection	
User	
	Add User
	Cancel

This page is only accessible for collection managers or system administrators.

Most fields are common text fields or drop down lists. There were you see the word , you will see a new pop-up window when clicking. Via this new window you can select the corresponding information from the other catalogues.

To add a user to a collection, you will have to click on button will also open in a new window. The difference with the previous is that every time that you click on Choose the name of the new user will appear on the screen in the background. This way you can add as many users as you want, until you click on Close

After the collection manager clicked save, the Edit screen is opened and a couple of additional options become available.

The collection manager can give access to the sub collections to all other kind of users. This is done simply by clicking on On sub collections...

The added user can have different roles per sub collection.

In case the added user is a registered user, the collection manager be offered the possibility of fine tuning the access even further.

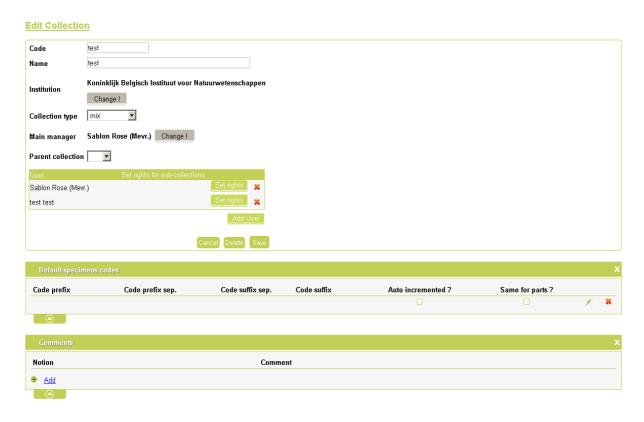
This is done via the Manage widgets button.

For each scope (specimen, individual or object) you are able to give access to one or more fields for a particular registered user.

In this example the registered user will have access to the exact locations in the depositories. Only for the collection for which this access has been granted, that is.



Additional widgets on collection level once you have pushed the 'Save' button.



Via the *Default Specimen codes* you are able to set a main prefix and/or suffix, as well as a separator for the code that will be used within this collection. This does not prevent the user of manually editing the main code on specimen level of course. It can be very useful, though, is you always to use the same prefix and/or suffix for you collection most of the time. If you want to increment a numeral main code automatically each time a new record is created, the you will have to tick the corresponding box in this widget. Do not use this option, though, is you often have to fill in non-incremental numbers. This will save you a lot of correction time. Should you wish to use the same main code on object level as on specimen level, then you can avoid typo errors as well as time by ticking the last box in this widget.

The *Comments* widget can be used to add some additional comment on your newly inserted collection.

The same widget is used in all other catalogues as well. Per introduced notion, you can add only one comment, though. In case you want to add a comment with regards to the same notion, then you will have to add it to your already existing commentary. Additional notion types can only be added by your system administrator.

The External link widget allows you to add a URL and some comment on the link.

6.2 Add Catalogue items

All items in the menu 'add – catalogues' work in pretty much the same way. Let's, therefore, have a look at an example in the taxonomical catalogue.

When you add a new item, you will be asked to enter some basic data first. These you can save by clicking on the corresponding 'save' button. This action, in theory, already suffices to add a new catalogue item.

New Taxonomic unit



Additional widgets on catalogue level once you have pushed the 'Save' button.

The action of pushing the 'save' button has an additional purpose. You are now able to see some additional widgets that allow you to add more information on your catalogue item.

After completing the data in these widgets, you will have to click the 'save' button again and this will conclude your catalogue item.

In case the information that you want to add contains an unknown value, you can best leave the widget empty. It makes no sense what so ever to fill in an 'undefined' value. Do you not have the exact latitudes or longitudes in the GTU catalogue for instance, the you simply skip filling in this widget!

In the previous chapters you have seen the use of two of the most common widgets: *comments* and *External link*. When reviewing your profile, you have seen the use of the '*Addresses*' and '*communications*' widgets. These last two widgets are available in the People catalogue as well.

The classification catalogues (Taxonomy, chronostratigraphy, lithostratigraphy, lithology and mineralogy) contain other commonly used widgets:

Let's have a look at the following widget examples: *People, Current name, Synonyms, recombinations, keywords, vernacular names.*

People widget

The *people* widget allows you to fill in a number of people that have played a role in different domains in creating the catalogue item that you are introducing. This specific example shows that you can add any number of different type of authors (main author, correctors, reviewers, etc.). You can also introduce the names of experts in certain domains that may have attributed to your catalogue item.



<u>Remark:</u> Browse through the Glossary page for some explanation with regards to the difference between reviewers and correctors, among others.

Current name widget

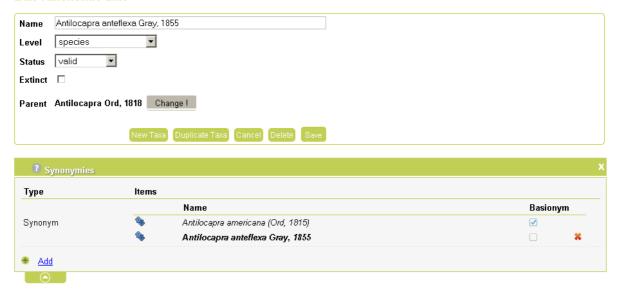
A classification is never a fixed element. It is not uncommon that an old name is introduced in a catalogue. This widget will allow you to link that older name to the current valid name of the item. E.g. old name is *Stenus insularis Casey*, 1884 and here you can see the current name:



Synonyms widget

The preceding widget can be regarded as a type of special synonym. You could in fact (and most probably should) introduce the current name here as well. Of course, this widget allows you to add an number of other types of synonyms. S you add a synonym that has already other synonyms attached to it, the system will automatically add all other known synonyms to your new entry.

Edit Taxonomic unit

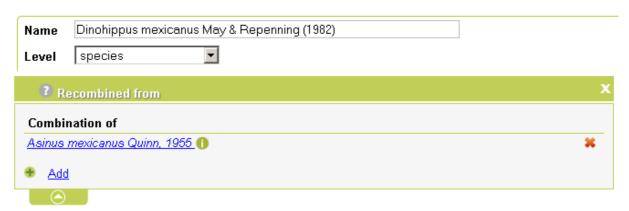


<u>Remark:</u> Look at the glossary to get some more information on the different types of synonymy used in the application.

Recombination widget

Some catalogue names may be formed out of other existing names. Via this widget you can point to the original combinations that where used to make up the name you entered in the catalogue. A catalogue item can sprout out of two original combination maximum.

Edit Taxonomic unit



Keywords widget

There exists something known as an international standard with regards to Biological Collection data in order to export data. This standard is known as the ABCD (EFGH) standard. You can split up your catalogue name in different field entities that can be used by the system to export the data in the above standard.

Although the use of this widget is not obligatory, it is strongly advised to enter at least the most commonly used fields in this widget. You can do this by clicking on the part of the name you want to extract and then choosing the corresponding keyword.

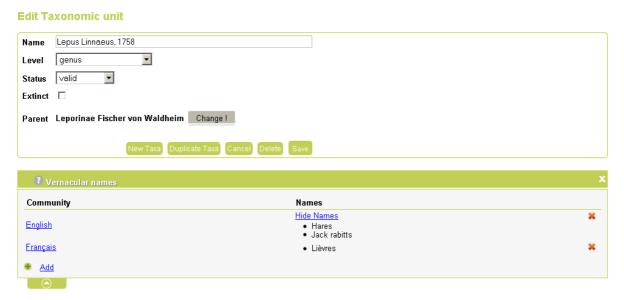


<u>Remark:</u> See the glossary for more information on the notion of each keyword and the domain it is used in.

Vernacular names

As not everyone is a specialist in the domain of classification items, it may be useful to add the common names used for the item in everyday language. One example: a *Lepus Linnaeus* is better known in English as a hare.

Via this widget you can add one or more common names (or vernacular names) per language community.



Property widget

Finally, you can add something that we refer to as 'properties' in many places in the application. This widget can be considered as a special form of structured commentary. Let's have a look at a specific fictitious example:



In the above screen shot you will see two types of properties that were added to a GTU catalogue item. On the one hand, we can view a couple of temperature measurements in C° taken with an outdoor thermometer in the course of Saturday 01/01/2011.

On the other hand, we can also see the original latitudes and longitudes that were entered in DMS (degrees month seconds)

It would be perfectly possible to enter this information in a normal textual comment field. It is much less evident to look up something via a query if it is entered in a pure text field. If you enter the same type of information in the same structured way every time, the system will probably be able to offer a property query criteria in the future. Before this feature is fully developed, you can already benefit from a more structured overview of your information.

6.3 Add Specimens

Although the addition of 'specimens' is done via widgets, as we have seen when adding collections or catalogue items, a specific chapter has been attributed to this action. The first main difference between adding a catalogue item or a specimen, is that we will get the opportunity to enter at least three different tabs on the specimen screen. These tabs actually correspond to the three different scopes found in the specimen search screen: Specimen, individual and object levels.



Just as with the widgets in the different catalogues, it is not compulsory to fill in all widgets on all levels. You can fill perfectly enter a specimen (on batch level) without filling in the information regarding the individual or objects, for instance. The opposite is not possible, however. You cannot fill in an object without linking it to an individual that is not linked to a specimen (on batch level)!

Let's go straight into the different levels:

6.3.1 Add a Specimen scope (batch level)

You will immediately notice that there is at least one widget that is compulsory: the collection widget.

By clicking on 'Choose', you will get an overview of all the collections to which you have an encoder access. You just click on the desired collection name and that is it.

Or maybe not quite. You still need to indicate if the batch you are describing consists of physical process.

Or maybe not quite. You still need to indicate if the batch you are describing consists of physical elements or are the result of an observation.



Next you can fill in all information related to the fieldwork performed or the specimens collected. Do not worry in leaving widgets open if no information is available.

Most widgets will have a 'Choose' button that will allow you to link catalogue items to your specimen batch. Other widgets will contain text fields that you fill in manually or where you can select items from a menu directly.

Giving an overview of all possible widgets would lead us too far in this manual, but let's have a closer look to some of the more special cases:

Host widget

This widget can be used when describing a parasite that was found on a host item. You can either fill in the taxonomic classification name on which the parasite was found. You can even link it to the actual host object in another collection that you have stored in a depository, if required.



Accompanying elements widget

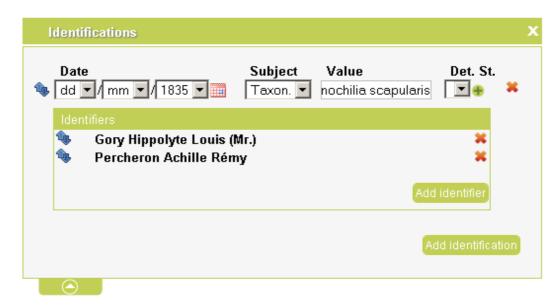
This widget is very similar to the previous one, although it describes an opposite situation. Image that you are describing a shell on which another creature is present. You can fill in the widgets as usual for the shell and you can then use the accompanying element to describe the 'creature'. You would have to choose the 'biological' element in this case and via the 'choose' button you can select the taxonomical name of the creature, for instance 'Bryozoa'. This widget is not only used for biological items, it can just as well be used to add different minerals that are found on a particular rock specimen. You could then introduce the names of the minerals found as well as e.g. the % of area they occupy on the rock.



Identifications widget

This widget will allow you to fill in a number of (chronological) data with regards to different kinds of determinations.

Someone (the determinator) could have noticed that on a particular date the specimen batch that you are introducing belongs to a certain genus. Someone else can in a later stage have performed a determination on species level.



<u>Attention</u>: additional comments with regards to the different determinations can be stored in the comments widget under the header notion 'determinations'.

Once the widgets have been filled in with all information desired, you can save the record by clicking on the 'Save' button. You will now notice that the individuals tab is released for encoding purposes.

Collecting methods widget

In the left column you will get a list with all collecting methods that are available for use. You can filter this list by entering the word or part of the word you want in the *Available*' field on top of the widget. If you do not find the desired method, then you can add it to the catalogue by introducing it in the field below. You save the new entry by clicking on the green plus icon next to the field. The item will now be available in the list. You can select one or more methods by

using the 'Shift' or 'CTRL' buttons. You can now place your selected methods in the right column by clicking on the arrow to the right. For removing items from your selected list, you perform the same operation in the right-hand list but you will have to click on the arrow to the left instead.

The collecting tools widget works in exactly the same fashion. (see also screen shots of widget in specimen search chapter)

The usage of these widgets will mean that you will hardly ever need to add information in the tools or methods catalogues. You will, in fact, only use the catalogues when you want to introduce additional information.

6.3.2 Add Individual scope

Once the specimen batch record saved, two new individual tabs are activated. The first tab will give you an overview of the individuals linked to this specimen batch. Of course, the very first time you enter a specimen, this tab will be empty. You can thus click on the next tab 'New individual'.

On this scope level you will introduce data with regards to: sex, life stage for biological individuals or rock formations for geological elements and you will be able to indicate the status of the type material.

The widgets are more or less self explanatory and thus no detailed information is needed here. Let's look at three more particular widgets, though:

Social status widget

If animals are living in a social group, you can use this widget to indicate the role the individual plays within that group. You can, for instance, indicate that a particular individual in a hive of bees has the role of 'worker bee'.



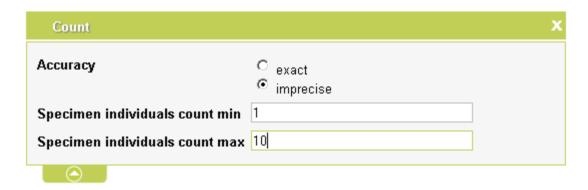
Sex widget

You will notice that this widget has a particular field that is called 'sexual state'. You can use this field to add a state or property in relation to the sex of the animal. A female individual can e.g. be pregnant and can be carrying eggs. You could thus introduce the word 'Ovary' in this field.



Counts widget

You do not have to create a new record for each and every individual that want to describe. If you have several individuals that share exactly the same characteristics in your batch, then you can fill in one record and you simply need to mention the number of individuals in this widget. You can either fill in the exact number of else you can give an estimate by filling in a lower range and an upper range.



You can now save the record by clicking the 'save' button.

The system will automatically show you the overview tab for the individuals. Via this page you can now insert a new individual record or , you can duplicate the existing record and edit some parts in order to quickly encode a new record.

You will see that two new icons have appeared next to the overview record line. Via these icons you can navigate to the two last tabs with regards to the objects.



6.3.3 Add Object scope

The first tab will give you an overview of the objects linked to the corresponding individual. As we have seen before, you will have to add an object in order to get an overview here.

This brings us to the core of the application that will be of interest to the true collection managers among you. All widgets that you will find here will have to do with the objects themselves, their physical state, the way they are conserved, etc.

All widgets are again more or less self explanatory.

By clicking on the 'save' button you can now save the object record. Another new object belonging to the same individual can quickly be encoded using the duplicate button.

Be careful when entering objects that you place the object in correct relation to the individual. If you want to add an object to the individual on the second line in the overview page, then you will need to use the icons next to the second individual's line!

There is but one widget that I would like to comment on in more detail.

Maintenance widget

This widget can be used to keep track of information with regards to actions or observations of the object in the depositories and all this in a structured way. Let's have a look at just one possible example below: on the 01/05/2010 we can see that alcohol has been added to the container of the object. We can also keep track of whom performed this action.



You will notice that you can readily access and read this type of information, but you cannot add it directly in the widget as you can with all other type of information. In order to add data in this widget, you will have to consult the 'Mass Actions' menu item in the next chapter.

7. How to use the Administration menu

This menu 'administration' contains some functionalities that can be used by encoders as well as collection managers.

7.1 Pinned items

Although, you will not find this item in the 'administration' menu (but in the 'Search menu'), it is worth mentioning in this section.



As I mentioned before, you can save a specimen list and/or search criteria via a link on your *dashboard*. You can also decide to select a number of records by 'pinning' them in a temporary zone for the duration of your session or until you remove them manually.

You can always look up these temporary lists via the 'search menu- pinned items'. You can then select the scope in which you saved your items: Specimens, individuals or objects.

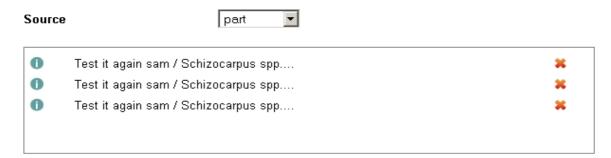
The reason why this functionality has been described here is that you will need these items whenever you want to perform a Mass Action.

7.2 Mass actions

Once you click on the 'Mass actions' menu, you will be guided to a screen where you can perform a number of actions on several records at once. The very first thing that you will have to do, is choose a scope in which you want to make a change: specimen, individual or object level.

By choosing such a level, a number of dedicated change options will appear. In the top box, you will see the records appear that correspond to the level you chose. These records are in fact the once available in your pinned items lists.

Mass Actions:



Next you select the fields you want to edit; You fill in the desired new information and click on the 'Go' button. A message appears to tell you that all went well and you get the possibility of performing a new 'mass action'.

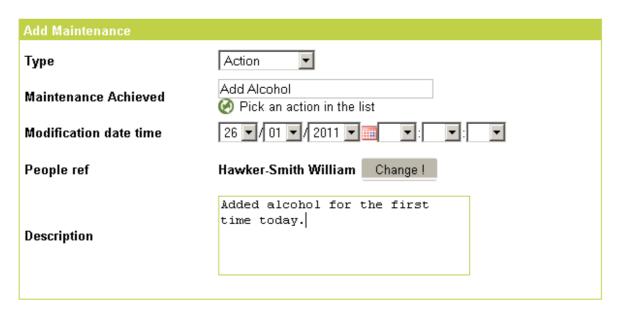
Action Status:

Everything seems to go well. Your action was applied to 3 records

Do another action Go to the board

Pay attention that you remove the records from your pinned items list, if you wish to perform a new 'Mass action' and if you do not want the current records to be changed again!!!!

Finally, it is worth mentioning here that you can use the 'Mass action' functionality to insert information in the maintenance widget. Since you probably want to enter the same kind of information in several records at once, it makes perfect sense to use this functionality as quickest way to add maintenance info.



A last very important remark: Although the purpose of the mass action menu is to edit a large number of records at once, common sense should prevail when using this functionality. So do not try to update thousands and thousands of records at once!!! In case of doubt, do not hesitate to contact your system administrator for more details!

7.3 Users (for Collection managers only)

Via this menu you can search users' profiles and add new users.

The profiles follow the same structure as your own profile page in the preferences menu. A collection manager can view and edit the profiles of all 'encoders' and 'registered users'. A collection manager can also view the profile of another collection manager, but you will not be able to alter these type of records.

Name Type Status Encoder ▼I All « ([1]::2::3 > » ▼| Status Name ▼ Given Name Type Bruaux Sébastien Encoder 4 Cordier Aurore Encoder 7 Crabbe Sonia Encoder Y 8 Mickael Encoder Descamps 4 8 Deschamps Marie Encoder 7 De Smedt Ken Encoder 4 Dubois Isabelle Encoder 4

In practice, you will be using this menu mainly to add new 'encoders' and to give them access to your collection(s). A 'registered user' will probably create his/her own profile via the DaRWIN website, but you will be able to create this type of user manually as well, for instance to give temporary access to visitors at the RBINS to your collection(s).

New User

« ([1]::2::3 > »

Users Search



Annexe 1: Overview of used icons

Icon	Description
	Will lead you back to your dashboard (home) page
(1)	Will lead you to a login page and will end your current session
•	Via the green plus icon you will be able to add elements
×	Via the red cross you can either remove an element or close a widget
0	Via the information icon you can view some addition information
≥	Via the crayon icon you can open a record in edit mode
9	Via the double document icon you can duplicate the current record
•	Via the blue or green rectangular plus icon you can make lower levels visible on screen
	Via the calendar icon you can pick a date visually
(9)	Via the link icon you can perform related searches in the classification catalogues
3	Via the eye icon you get access in read-only to a record.
શ	Via the pin icon you can select or deselect a record in the result page. The selected records are stored in the pinned items menu. You also use this feature to select records in order to save them in a list.
☆	The star icon has two functions. Within a result page it will indicate that you have a type (e.g. holotype) record. Within the saved lists (specimens or searc heriteria) it will indicate your favourites.
B	This icon will indicate that your object is a physical object stored in a depository.
×	This icon can be found in the 'Saved specimen' lists. If clicked, it will turn red. You can now delete this selected record from you list by clicking on 'remove from selection'.
•	Everytime you hover over the question icon, some help will appear.
V	Sort a result ascending (A-Z)
	Sort a result descending (Z-A)
Choose!	Via this button you will be able to retrieve information from the catalogues via a new window.

Annexe 2: Glossary

Acronym The accepted acronym for the Virus, e.g. PCV for Peanut Clump

Virus, used in virology

Author Team The author(s) who published the full name, used in botany

Author Team and Year Author name and year, used in mineralogy or bacteriology

Author Team Original And

Year

The first person(s) who validly published a species, used in

zoology

Author Team Parenthesis Author team of the basionym of a combination, used in botany

Author Team Parenthesis

And Year

The original author when a species was transferred to another genus and the year of the original publication, used in zoology

Basionym A name at its introduction; changes in rank and/or position create

new combinations of names, but do not alter the basionym

Breed Name of the breed of an animal, used in zoology

Combination Author Team

And Year

The citation of the authors responsible for the new combination

and the year of its publication, used in zoology

Corrector Is used for a person that will make changes to a taxonomical

classification. Sometimes a taxon was validly named but imperfectly defined; in this case, the word 'emend' (emendatus) is used, followed by the name of the person who cleaned it up.

Another type of corrector is the 'mutatis characteribus'

Cultivar Group Name A formal category for cultivars, individual plants or

assemblages of plants on the basis of defined similarity, used in

botany

Cultivar Name a cultivar name, which is a Latin botanical name followed by an

epithet, mostly in a vernacular language, used in botany

First Epithet species epithet or the epithet of the subdivision of a genus, used

in botany

Genus Or Monomial Genus or higher taxon name, used in zoology or bacteriology or

virology or botany

Homonym Identically constructed names based on different types;

identically spelled names for different taxa.

Hybrid flag Flag indicating that this is a hybrid ("x") or a chimaera ("+"),

used in botany

Individual scope Within the application, an individual is a particular

element(animal, plant, rock, etc.) within a batch that has a set of

specific characteristics

Infraspecific Epithet The final epithet of a botanical name of infraspecific rank, used

in botany

Isonym Two basionyms based on the same type. The first Isonym will

have nomenclatura status, the second one is generally not

accepted.

Name Approbation Valid name, used in bacteriology

Object scope Within the application, an object (whole or part of an animal,

plant, rock, etc.) has the same characteristics as the attached individual in a batch and it usually a physical object stored in a

depository.

Parenthetical Author Team

And Year

Author team and Year of the basionym of a species or

subspecies, used in bacteriology

Publisher This is the person publishing a name. E.g. <u>Brown in Gray</u> would

mean that Brown is a main author and that Gray is a publisher

Related author Other indications which may be encountered appended to

scientific name authorship include indications of taxonomic status. These can often be recognised as *Brown sensu stricto Gray* where Brown is the main author and Gray would be a

related author

Reviewer Is used for the person re-examining a classification item. Very

often the names of the reviewers will be placed between

brackets. E.g. Brown (Gray, Black) where the latter two would

be the reviewers and Brown would be the main author.

Secondary author This type of author is harder to detect in a taxon name. You

could have the following example: <u>Brown, Gray & Black</u> where

Brown and Gray could be a main author and Black is a

secondary author

Species Epithet species name, used in zoology or bacteriology

Specimen scope Within the application, the word specimen refers to a batch of

elements (animals, plants, rocks, etc.) that have been collected at

the same sampling location.

Subgenus name, used in zoology or bacteriology

Subgenus Author and Year

Subspecies Epithet

Used to indicate the author and year, used in bacteriology

subspecies name, used in zoology or bacteriology

synonym In taxonomy the concept of synonymy relates to the application

of different names to the same taxon

Trade Designation Name Trade name used for a specific cultivar, used in botany

Viral Species Designation The formal name of a viral species. Example: Saccharomyces

cerevisiae virus L-A, used in virology

Annexe 3: Example of a Lithostratigraphical unit

		Lithostratig	rafie van het Tertiair ir	n Vlaanderen (Pale	ogeen geb	aseerd op R.	Marechal	en P. Laga	a; 1988)	_			
LITHOSTRATIGRAFIE			LITH	VOORNAAMSTE LITHOLOGISCH KENMERK		OUDE BENAMING (en/of symbool)			CHRONO - STRATIGRAFIE		OUDERDOM 10 ⁶ Jaar		
GROEP			LI	D									1,77
	MERKSPLAS					zand	Merksemia						1.77
	ULLO BRASSCHAAT POEDERLEE	MOL Kiezelooliet	Zandviet \ Merksem Hernek Schorv Mal Krusschans Oorderen Luchthal	Pousendorp Brunssu	n 1	zand	Brasschaa Scaldisi	-			E E	PLIOCEEN	
	KATTENDIJK	KASTERLEE			zand	kleihoudend		Des	urnisan		8		l
	DEST		Deu Des	ime		zand	Diestiaan				NEOGEEN		5.4
	BERCHEM	BOLDERBERG	Antwerpen Kiel Edegem	Opi	nk zand	zand	Bolderiaan	Antwerpiaan	Bdd Bdc	Bdb		MIOCEEN	
	VO	ORT	Vo. Velich	ort	211	zand klei	Chattiaan			$I \vdash$	Last OLIGOCEEN	23.8	
	EIGEN	BILZEN				zand			R2d				28.4
RUPEL	ВО	юм	Put Terha Betsele	-Wasa		klei	klei Rupeliaan		R2t			Vroeg OLIGOCEEN	
	BILI	ZEN	Kleine S Be	pouwen		zand klei zand		R1	R1dR2a- R1c R1b+a	b		Vroeg OLIGOCEEN	
	BORG	ILOON	Kerkom Boutersem	Alden Bie	en zand	zand klei		Tg2				Z	
TONGEREN	ZELZATE	Stithern	Ruisbrook Waterviet	Neerre	zand klei	zand zandh. klei	Tongeriaan	1	Tg1	1		Laatste EOCEEN	33.6
		1	Bassevelde Onder	Grimmerting	zand	klei		53	a3	_		Laatste EOCEEN	37.0
	MALD	EGEM	Oblesigne Sand Sand Sand Sand Sand Sand Sand Sand		Complex		,	70	Last EOCEEN				
	LE	DE				zand		Lediaan (L Leekeniaan	e) 0 kg		[46]		41.2
ZENNE	901	000	Chaumont Gistoury) Neer	rmont-Gistoux \ Neerijse \ Diegem \ Kraaiberg 2and + kelkzendsteenbanker		zand+	Brusseliaan			38	Midden EOCEEN		
a.c.rere.	ZENNE BRUSSEL AALTER		Cede			zand		Boven (P2)		-	PALEOGEE	n	
	GE		Been Vier Pro-	zele		zand houdende klei	Paniseliaan Onder (P1)		P1d	+	Z	Z	49.0
			Merel Ege	lbeke em		klei zand			P1m Yd	\dashv			
IEPER	TIELT		Kortei		leem (sit) klei				Yd (Yd1) Ye	_		Vroeg EOCEEN	
	KOR	Alabeke Moen = Roubaix Moen = Roubaix Seint-Max = Orchies Mont-Herbut Mont-Herbut											
LANDEN	TIE	NEN	Knokke	Loksber Dorm				L2	1		E Last PALEOCEEN	54.8	
LANDEN	Grandgise Hannut Halen i Lincert Waterschei		zandig	zand sit \ kalksteen klei			11 c b+	a		Last PALEOCEEN	58.0		
	HEERS		Gelin Or		mergel kleiige zand Heersiaan His		1	Mildren Pal Eccess					
HASPENGOUW	OPGLABBEEK HOUTHEM		Eisden \ Opceteren		zand \ klei		Infraheersiaan		116			Midden PALEOCEE	161.0
HAPENGOUN						kallesteen	Mo	ntiaan			Ш	Vroeg PALEOCEEN	65.0
Bron : ANRE 290	13/114									_			