

Citizen Science at the Botanic Garden

Quentin Groom, Plantentuin Meise





737,816,556 records
55% from “*citizen scientists*”

Chandler, M., See, L., Copas, K., Bonde, A. M., López, B. C., Danielsen, F., ... & Rosemartin, A. (2016). Contribution of citizen science towards international biodiversity monitoring. *Biological Conservation*.

"A world in which biodiversity information is freely and universally available for science, society and a sustainable future."



Local versus global



By Lienhard Schulz (Own work) [CC BY-SA 3.0
(<http://creativecommons.org/licenses/by-sa/3.0/>)], via Wikimedia Commons



By NASA/Apollo 17 crew; taken by either Harrison Schmitt or Ron Evans
[Public domain or Public domain], via Wikimedia Commons



Herbaria @ home



166,000 specimens
over 10 years


herbaria@home specimen - Google Chrome

Not secure | herbariaunited.org/atHomeForm/?allocate=0&ref=main&review=1&key=c006e704dc71e36f81444e6cf65bd7ed

[edit](#) Herbarium sheet form

The sheet will have one or more labels or annotations, please copy the details from these into the form below, then click 'send' to save when you have finished. To move or zoom the image click on it with the left mouse button. Clicking and dragging moves the image. To zoom out alt-click or use the '-' icon at the top left. Click on the thumbnail image at the right to jump around the sheet. The 'drawing-pin' button detaches the image into a separate window. To move between sheets in your allocated set use the '<' and '>' buttons. 'list' shows overview of the sheets allocated to you.
[View documentation guidelines](#)

< list Skip this sheet Can't read label No information Photo is faulty



filing note: Please document only the specimen bar-coded as **1130680** and ignore any other specimens on the sheet.

This sheet has been documented by another user and is now waiting to be checked. Please make any corrections necessary, then tick the 'checked' box and submit the sheet.

☒ specimen

taxon ☒ ☒ ☒

collected by ☒ ☒ ☒

collection date (to) ☒ ☒ ☒

herbarium ex herb ☒ ☒ ☒

site ☒ ☒ ☒

OS grid ref (TQ65) ☒ ☒ ☒

In the marshes ☒ ☒ ☒

notes

fruits/flowers

collector's number

user comments

☐ request feedback about this sheet

☐ mark as checked (tick this only if there are no further corrections to make)

or


[Sheet RM 1130680 \(Natural History Museum\)](#)
[Hide extended help text](#)

This sheet is one of a trial batch of Carex and orchid specimens that the Natural History Museum (BM) are using as a pilot project, testing different documentation systems. There is no need to record BM or the Natural History Museum as an ex herb entry for this sheet.




Botanic Garden
Meise

<http://lesherbonautes.mnhn.fr/> and <https://www.herbonauten.de/>

**Die Herbonauten**
Pilotstudie für das Herbar der Biowissenschaften

Wer sind wir? · Missionen · · Einloggen

Wählen Sie Ihre erste Mission




Auf den Spuren von Alexander von Humboldt in den Anden

In dieser Mission geht es um die Pflanzengattung *Arenaria*, auch "Sandkrieger" genannt. Helfen Sie uns und unseren Kollegen Sabine von Merling bei der Erforschung dieser Gattung mit der sich schon Alexander von Humboldt befasst hat.

100%

Fortschritt: 9000 Beiträge

[Teilnehmen](#)



Die wilde Welt der Chenopodiaceae


In unserer ersten Mission geht es um die Familie der Chenopodiaceae ("Gänsefußgewächse"). Diese beinhaltet einige Vertreter wie Spinat und rote Bete die sich häufig auf unseren Küchentischen wiederfinden. Darüber hinaus gibt es einige sehr widerstandsfähige Arten, die an Orten gedeihen an denen sich andere Pflanzen niemals blicken lassen könnten...

97%

Fortschritt: 52000 Beiträge

[Teilnehmen](#)


Können Sie das Land nennen, aus dem dieses Exemplar stammt?

[Beitragen](#)

Letzte Aktivitäten


[Mehr Aktivitäten anzeigen](#)

[Alle Missionen anzeigen](#)

**Les herbonautes**
L'herbar numérique collaboratif citoyen


Qui sommes nous ? · Missions · Discussions · · Se connecter

Qui sommes nous ?



Ce site vous propose de participer à la création d'une base de données scientifique à partir des millions de photos des plantes de l'Herbar de Paris. A vous d'explorer ces plantes et leurs étiquettes pour déterminer quand et où elles ont été récoltées. Les données que vous trouverez sont des éléments précieux pour mieux connaître la biodiversité et mesurer et prévoir son érosion (en savoir plus).

Choisissez votre première mission



Nouvelle-Calédonie : une flore unique au monde !

La Nouvelle-Calédonie est un territoire apprécié des botanistes, qu'ils soient amateurs ou scientifiques aident d'étudier une flore originale, riche en espèces présentes uniquement dans cet archipel. Partirez ensemble à la découverte des plantes rarement vues, rarement récoltées...

57%

Objectif: 3000 contributions


[Participer](#)

Les herbonautes en chiffres

2 929 contributeurs
69 missions
207 870 spécimens


[Plus de chiffres](#)

Activité




YvesBouze a identifié le champ Région pour le spécimen *Glauxium autumnale* (MNHN:P50532989) dans la mission *Les agracanthures, Niveaux, Moyen*

il y a 3 minutes



YvesBouze a identifié le champ Pays pour le spécimen *Zinnia grandiflora* (MNHN:P50532987) dans la mission *Les agracanthures, Niveaux, Moyen*

il y a 13 minutes



YvesBouze a identifié le champ Récolteur pour le spécimen *Glauxium autumnale* (MNHN:P505327283) dans la mission *Les agracanthures, Niveaux, Moyen*

il y a 13 minutes

[Afficher plus d'activité](#)

·

[Show all](#)



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Smithsonian Transcription Center

Secure | https://transcription.si.edu/project/11268

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SMITHSONIAN DIGITAL VOLUNTEERS: TRANSCRIPTION CENTER

[SIGNUP](#) [LOGIN](#)

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PAUL BARTSCH - NOTES OF SPECIMENS COLLECTED ON THE PHILIPPINE EXPEDITION, CIRCA 1908

About the Project

Despite being home to a great variety of species, the Philippines were not a place in which to conduct research between 1898 and 1903. The Pacific island archipelago was affected by the Spanish-American War of 1898 and an insurrection that continued until 1903. However, by 1907, the situation had stabilized and the United States was eager to begin exploring its flora and fauna. Paul Bartsch of the Smithsonian joined 69 other participants in the Philippine Expedition traveling aboard the 25 year old research vessel "Albatross." Among the many specimens Bartsch observed and collected were Nudibranchs, a type of marine Gastropoda. Included in his notes and descriptions are highly detailed illustrations by Kumataro Ito. Please join us in transcribing Bartsch's 1908 field notes to capture his personal record of specimen location, sample set number and descriptions. Transcribing Ito's Japanese notations on the watercolor illustrations would be an added bonus! (Tip: Japanese notations can be transcribed as characters or they can be romanized. Translation is not required for the project to be complete.)

[Read More](#)

[Catalog Record](#) | Go to Page [Go](#)

[Start Transcribing](#)[Start Reviewing](#)

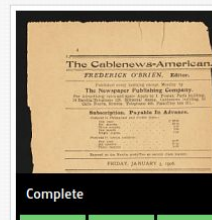
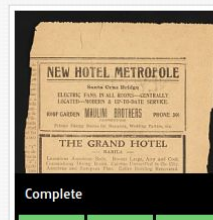
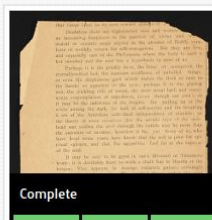
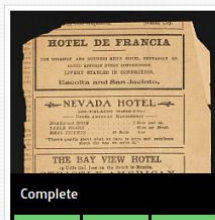
Please [sign up](#) or [log in](#) to review.

Project Progress ([details](#))

21
CONTRIBUTING
MEMBERS

202
TOTAL
PAGES

Show pages needing (scroll down to load more): [Transcription](#) [Review](#) [Notes](#) | [All](#)





feedback



Botanic Garden
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← → ↻ 🏠 Picturae ICT BV [NL] | https://velehanden.nl

Home Projecten Deelnemers Nieuws HelpInloggen Aanmelden



Help je mee onze geschiedenis op het internet te zetten?

Leuk en verslavend!


- Kies een project
- Voer gegevens in of beschrijf foto's
- Op je eigen pc of laptop
- Waar en wanneer het jou uitkomt
- Draag bij op een leuke en eenvoudige wijze!

Aan de slag


Meedoen is eenvoudig, probeer het nu uit.

Oefenen


Een greep uit de projecten



Buitenlui: Geannexeerde gemeenten Amsterdam



Tags en uitleg




Met de rug tegen de muur - Tekstaffiches WOI


Nieuws

Het Westfries Archief; De uitdaging: geef meer dan 20.000 dienstbodes een naam

28 september 2017

Deelnemers aan het project Westfries Geregreerd starten op 2 oktober met een bijzondere uitdaging: binnen een maand tijd meer dan 20.000 namen invoeren vanaf de dienstbodekaartjes.

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**Decipher our collections,
discover hidden archives
and contribute to knowledge**

Join our community of 1,000+ volunteers


[Get involved ↓](#) [Learn more](#)

Image by John Taro from Flickr


JOIN A VIRTUAL EXPEDITION OF...



Collection labels
Capture data from specimen and object labels to make it accessible for scientific and cultural research.
[See all labels](#)



Historical documents
Transcribe text and capture data from historical documents to make them digitally accessible.
[See all field journals](#)



Images
Identify and tag images of animals and collection objects to support information discovery and research.
[See all camera traps](#)



Transcribing Herbarium Specimens

Eugenia of the World K000752315.jpg
Catalog Number K000752315

A DIGI VOL Expedition

My Profile

Skip

Create Forum Topic

View Tutorial

Catalogue No.: K000752315

Taxa: Eugenia macrocarpa

Copy from previous task

2. Collection details

Collector(s)

Collector number

Collection Date

(from)	<input type="text" value="DD"/>	<input type="text" value="MM"/>	<input type="text" value="Year"/>
(to)	<input type="text" value="DD"/>	<input type="text" value="MM"/>	<input type="text" value="Year"/>

3. Location details

Verbatim Locality

State/Province/Territory

Country

Elevation

From	<input type="text"/>	-	To	<input type="text"/>
------	----------------------	---	----	----------------------

Verbatim Latitude

D°M'S"	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
--------	----------------------	----------------------	----------------------	----------------------

Verbatim Longitude

D°M'S"	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
--------	----------------------	----------------------	----------------------	----------------------

Verbatim Habitat

Verbatim Plant Description

Shrink

1. Museum details

Cultivated

Sheet

of

(if noted)



Transcription of notebooks

DIGIVOL Expedition
My Profile ▾

DIGIVOL Nature Diary of F. L. Berney 1917 Berney_Nature_Diary_1917_004.jpg
 4 of 281

[Skip](#)
[Create Forum Topic](#)
[View Tutorial](#)

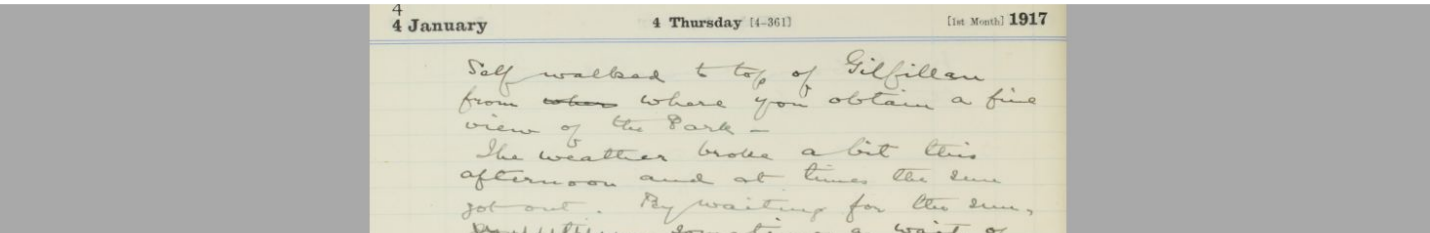
[< show previous journal page](#)
[show next journal page >](#)
[Rotate ↻](#)


[A](#)
[A](#)
[A](#)


⁴
4 January

⁴ Thursday [4-361]

[1st Month] **1917**







1. Verbatim Text ?

[Page 4]

[4 January 1917]

Self walked to top of Giffilan from [crossed out] wher [crossed out] where you obtain a fine view of the Park.

The weather broke a bit this afternoon and at times the sun got out. By waiting for the sun, [crossed out] w??ing [crossed out] sometimes a wait of

2. Where a species or common name appears in the text please enter any relevant information into the fields below [Shrink](#)

1. Date ?	<input type="text"/>	Location	<input type="text"/>	Species ?	<input type="text"/>	Common Name	<input type="text"/>	Party Name ?	<input type="text"/>
-----------	----------------------	----------	----------------------	-----------	----------------------	-------------	----------------------	--------------	----------------------



Processing camera trap images

← → ↺ 🏠 <https://volunteer.ala.org.au/validate/task/18637377?max=20&sort=id&order=asc&q=&offset=120>

A **DICIVOL** Expedition

DICIVOL

Quollidor Site 24: June 2017 IMG_0140.JPG
140 of 457



☐ This image is particularly interesting



Move between the image sequence to see what's coming in or going out of the current image

1 2 3

Animals visible: yes.

Selected animals



Notes Record any comments here that may assist in validating this task

Transcriber Notes

Validator Notes

Transcribed by Date Peek on 2017-07-26 10:38:57



**Botanic Garden
Meise**

Browser based administration of transcription templates

Browser based administration of transcription templates

Secure | <https://www.doedat.be/template/manageFields/8672>

Apps Plantentuin New Tab M autho inventaire florist BGM Image Man Building essenti

DOE·DAT·

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Search for... Q EN

Home > Administration > Template list > Edit Template > Manage template fields - Herbarium Belgii

Manage template fields - Herbarium Belgii

Add field Clean up ordering Preview template Export as CSV Browse Import from CSV

Order	DwC field	Form type	Label	Layout class	Validation	Category	Help text
11	originalNameUsage ()	text	Label name *			miscellaneous	? ↓ ↑ + × ✎
12	vernacularName ()	text	Vernacular name			miscellaneous	? ↓ ↑ + × ✎
13	miscellaneous ()	text	Uses			miscellaneous	? ↓ ↑ + × ✎
21	recordedBy ()	select	Collector *			collectionEvent	? ↓ ↑ + × ✎
22	earliestEpochOrLowestSeries ()	select	&			collectionEvent	? ↓ ↑ + × ✎
23	recordedByID ()	text	Collector(s) as given			collectionEvent	? ↓ ↑ + × ✎
24	recordNumber ()	text	Collection number *			collectionEvent	? ↓ ↑ + × ✎
25	eventDate ()	date	Collection date	DMY		collectionEvent	? ↓ ↑ + × ✎
26	habitat ()	text	Habitat			collectionEvent	? ↓ ↑ + × ✎
27	establishmentMeans ()	checkbox	Cultivated?			collectionEvent	? ↓ ↑ + × ✎
28	dynamicProperties ()	text	Plant description			collectionEvent	? ↓ ↑ + × ✎
29	fieldNotes ()	text	Miscellaneous			collectionEvent	? ↓ ↑ + × ✎
31	verbatimLocality ()	text	Locality as given *			location	? ↓ ↑ + × ✎
32	verbatimElevation ()	unitRange	Altitude			location	? ↓ ↑ + × ✎
33	verbatimCoordinateSystem ()	text	IFBL Grid cell			location	? ↓ ↑ + × ✎



Browser based administration of projects

Project Task Staging

1 Upload images

Upload your images to the staging area.

In addition to task image files, you can also upload auxiliary data files that can contain additional data that should be attached to individual tasks (e.g. OCR text). (?)

Select files

2 Upload datafile (optional)

Upload a csv file containing extra data to attach to each task. This can also be used for prepopulating fields within your template.

Clear data file

View data file

3 Configure columns (optional)

Add and configure columns in the table below to prepopulate data in your tasks. (?)

+ Add column

4 Create tasks

Review the staged images table and create tasks.

Create tasks from staged images

Staged images (5)

Actions ▼

Image file	externalIdentifier (NameRegex: ^(.*)\$ - (?))	
001bamps.jpg	001bamps.jpg	✕
002bamps.jpg	002bamps.jpg	✕
003bamps.jpg	003bamps.jpg	✕
004bamps.jpg	004bamps.jpg	✕
005bamps.jpg	005bamps.jpg	✕



Browser-based User Management

DOE·DAT

User settings ▾EN ▾

[default.home.label](#) [User List](#) [New User](#)

Show User

First Name	Quentin
Last name	Groom
Email	quentin.groom@jardinbotanicmeise.be
Created	2017-10-18 11:52:12.0
Temporary automatic key	e1c96b29-cb7a-4410-b02e-58ce2ea344d7
primaryUserType	
city	Meise
organisation	Botanic Garden Meise
secondaryUserType	
telephone	+3222600920
state	

Activated: FALSCH
Locked: FALSCH

Search for user

ROLE_USER

Temporary automatic key points to the user reset password URL. This is useful in cases when the user didn't receive the reset password e-mail, usually because spam filters got in the way.

Edit



Why Digivol?

Versatile

Browser based website
management

Made for use with multiple
institutions

Open Source

Under active development

Proven track record and reliability

Built-in user forum

There is a big community of AoLA
users

Downsides and compromises

Only versatile with limits

Some aspects are specific to Australian needs and the locale

If we don't fork the code we are restricted in what we develop

If we do fork the code we can't benefit from joint development

Positives and negatives of Crowdsourcing

- Higher visibility for our collections
- Better understanding of the scientific role of the garden
- The public feel they have a stake in our collections
- Cost per specimen decreases the more it is used
- Adaptable for different kinds of projects
- Needs to be constantly fed with projects
- Forums and queries need to be managed quickly and respectfully
- Some projects may be too difficult for untrained volunteers
- Constant promotion is required
- Requires institutional wide support



Public Engagement

WeDigBio

Home

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Resources ▾

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Team Members ▾

Worldwide Engagement for Digitizing Biocollections

Admin Login



What is WeDigBio?

Worldwide Engagement for Digitizing Biocollections, or WeDigBio, is a 4-day event that engages participants online and onsite in digitizing natural history collections. Onsite events are hosted by museums, herbaria, universities, and other institutions and enable face to face meetups where participants engage with local collections.

Online events engage volunteers from around the world, facilitating the transcription of specimen information from images hosted by transcription platforms, no matter where in the world the volunteers may be.



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>300 specimens transcribed by >50 'volunteers'



Dissemination of Data



Species interactions



By OrangeDog - Own work, CC BY-SA 3.0,
<https://commons.wikimedia.org/w/index.php?curid=6212320>



**Botanic Garden
Meise**

Phenology



Centropogon granulatus



Summary

Contribute to standardized projects

Document your records well

Share your data openly

Work together

"Think globally, act locally"

Enjoy it



Thank you!



10:47:48 AM 2017/02/16 8 °C ●

TRAIL CAMERA



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