

People in the biodiversity knowledge graph and their roles in building the data connections we need

26 July 2023

Erica Krimmel & Holly Little

BOTANY 2023, Special Lecture: *Supporting inclusive and sustainable research infrastructure for systematics (SISRIS) by connecting scientists and their specimens*

People connect collections...



...but collections aren't connecting people

Elizabeth Emerson Atwater

E. E. Atwater

Atwater, E. E.



E. Atwater

Mrs. E. Atwater

Mrs. Samuel T. Atwater

Elizabeth Atwater

Identifiers are a tool to connect people

CAS# 4898

Herbarium of
The Chicago Academy of Sciences

LOCALITY Potomac, Virginia
DATE June 1874
COLLECTOR Maria FIELD No. 1561
HABITAT
flower lavender color

E. E. Atwater colln
IDENTIFIED BY

HERBARIUM N. Y. STATE MUSEUM

Name *Lentiginos Lecontei*
Locality *Virginia*
Collected by *Mrs. E. E. Atwater*
No. Date

COLL. N. Y. STATE

Non. *Priginicula lutea Walt.*
Loc. *Jacksonville, Fla.*
Leg. *Mrs. E. E. Atwater.*

Mb70-F5-3000

Recorded by

- Atwater, Elizabeth E.
- Atwater, E. E.
- Collector(s): Elizabeth Emerson Atwater



SEARCH OCCURRENCES | 0 RESULTS

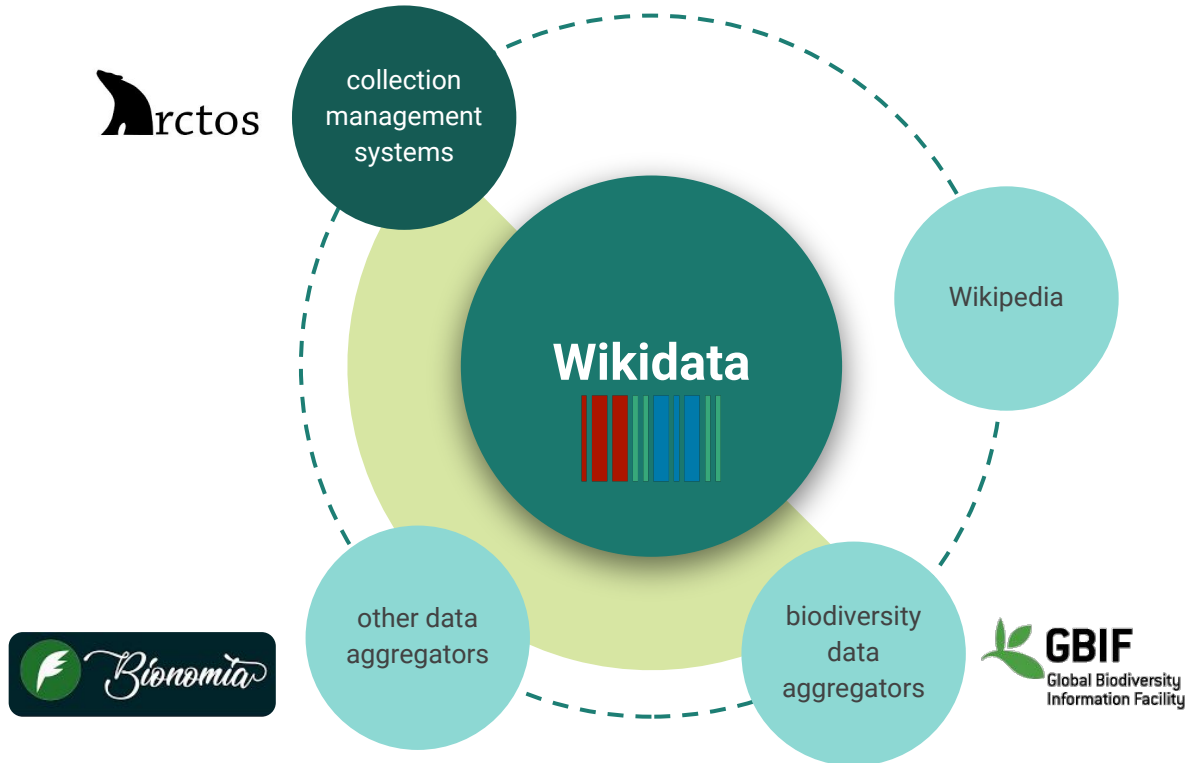
Occurrences

Recorded by ID

- <http://www.wikidata.org/entity/Q66581882>
- Q66581882

Identified by

Wikidata is a tool to use identifiers



Identifiers enable shared knowledge management



Name Variations for Elizabeth Emerson Atwater

- Elizabeth (first name) [search]
- Emerson (middle name) [search]
- Atwater (last name) [search]
- Elizabeth Atwater (aka) [search]
- Elizabeth E. Atwater (aka) [search]
- Mrs. Samuel T. Atwater (aka) [search]

<https://arctos.database.museum/gen/21295246>

The screenshot shows the Wikidata page for Elizabeth Emerson Atwater. The page title is "Elizabeth Emerson Atwater (Q66581882)". Below the title, it lists her as a "naturalist, botanist and botanical collector (1812-1878)". A table titled "In more languages" shows the following information:

Language	Label	Description	Also known as
English	Elizabeth Emerson Atwater	naturalist, botanist and botanical collector (1812-1878)	E. E. Atwater Ella Emerson Ella Atwater Elizabeth Atwater
Spanish	Elizabeth Emerson Atwater	No description defined	

The "Also known as" column is highlighted with a red box, showing the various names used for this individual.

<https://www.wikidata.org/wiki/Q66581882>


Identifiers enable shared knowledge management



Overview Specialties Network Deposited At

Co-collectors Identified For Identifications By

Has collected with:



Floretta Allen Curtiss
 * December 01, 1822 – March 03, 1899 †
 United States

Collected Rhodomelaceae and identified Halimedaceae

415 specimens claimed DOI 10.5281/zenodo.8034076

<https://bionomia.net/Q66581882>



Relationships To Elizabeth Emerson Atwater

From	Relationship	Begin	End	Remark
Samuel Tyler Atwater	spouse of			
Increase Allen Lapham	associate of			
Emma M. Taylor	associate of			
Mrs. E. Aiken	associate of			
Mrs. William Gooding	associate of			
E. P. Stevens	associate of			
Mrs. Gale	associate of			
Mrs. Hilliard	associate of			
Mrs. Pearson	associate of			
Mrs. George P. Hansen	associate of			
Mrs. Patrick Anderson	associate of			Travelled with Elizabeth Emerson Atwater to the United Kingdom, France, and Italy [jeweller: Did Atwater travel outside of the US?]
Mrs. George Vail	associate of			

<https://arctos.database.museum/agent/21295246>

Identifiers enable shared knowledge management

Bionomia

Overview Specialties Network Deposited At Specimens Science Enabled

2,220 specimens collected from at least 24 countries
16 specimens identified from at least 1 country
31 specimens used in 9 works

Progress 57%

Collected From **Identified From**

Map List Map List

Elizabeth Emerson Atwater
E. E. Atwater; Ella Emerson; Ella Atwater; Elizabeth Atwater
* August 08, 1812 – April 11, 1878 †
botanist, botanical collector, naturalist
naturalist, botanist and botanical collector (1812-1878)
http://www.wikidata.org/entity/Q66581882
W https://en.wikipedia.org/wiki/Elizabeth_Emerson_Atwater [View]
United States

Dates Collected
Chart List

<https://bionomia.net/Q66581882>



Collection Activity by Elizabeth Emerson Atwater

Role	Collection	RecordCount	Link
(any)	(all)	2417	Open Catalog Record Results
collector	(all)	2417	Open Catalog Record Results
(any)	CHAS:EH	26	Open Catalog Record Results
collector	CHAS:EH	26	Open Catalog Record Results
(any)	CHAS:Ento	1	Open Catalog Record Results
collector	CHAS:Ento	1	Open Catalog Record Results
(any)	CHAS:Herb	2386	Open Catalog Record Results
collector	CHAS:Herb	2386	Open Catalog Record Results
(any)	CHAS:Inv	4	Open Catalog Record Results
collector	CHAS:Inv	4	Open Catalog Record Results

Media Associated with Elizabeth Emerson Atwater Collection Activity

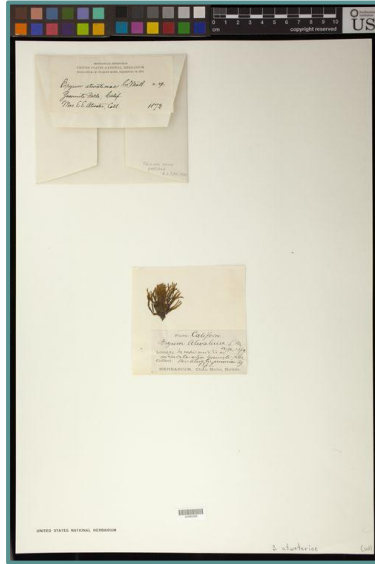
- 961 Media records referencing collected/prepared catalog records

<https://arctos.database.museum/agent/21295246>

Identifiers enable shared knowledge management



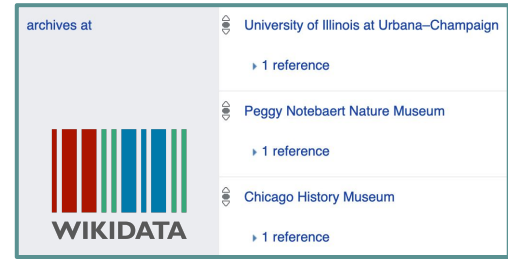
Ramirez J, Watson K, McMillin L, Gjeli E, Sessa E (2023). The New York Botanical Garden Herbarium (NY). Version 1.62. The New York Botanical Garden. Occurrence dataset <https://doi.org/10.15468/6e8nje> accessed via GBIF.org on 2023-07-20. <https://www.gbif.org/occurrence/1930479861>



Orrell T, Informatics Office (2023). NMNH Extant Specimen Records (USNM, US). Version 1.70. National Museum of Natural History, Smithsonian Institution. Occurrence dataset <https://doi.org/10.15468/hnhr3> accessed via GBIF.org on 2023-07-20. <https://www.gbif.org/occurrence/1456283672>



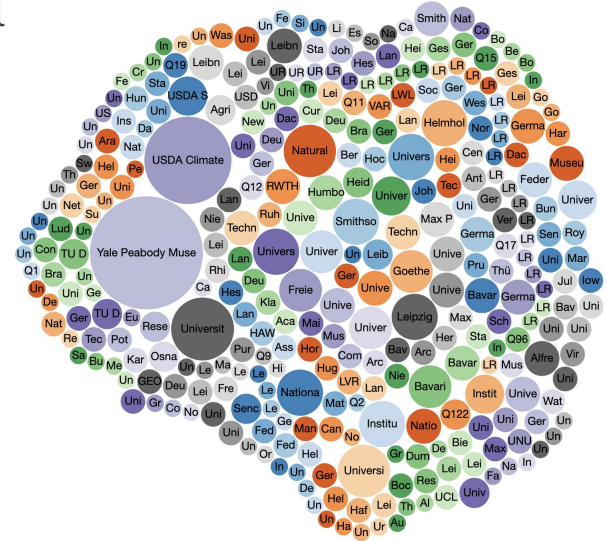
Kennedy J (2023). Harvard University Herbaria: All Records. Harvard University Herbaria. Occurrence dataset <https://doi.org/10.15468/63pvnh> accessed via GBIF.org on 2023-07-20. <https://www.gbif.org/occurrence/1999082509>



<https://www.wikidata.org/wiki/Q66581882>

Connected data facilitates novel discovery

e.g., what institutions hold archival materials for botanists – <https://w.wiki/75Si>



e.g., what institutions botanists are affiliated with – <https://w.wiki/75Sn>

Connected data changes collections management

Last: (Perso...	First: (...	Middle: (P...
Gardner	J.	A.
Gardner	Julia	A.
Gardner	Julia	Anna
Gardner	Julie	
Gardner		

Coll... *E.S.T.* Ident *E.S.T. Tremball*

Collectors: 1 Moore, Ellen James,

GUIDs

	Pref...	Type	GUID
1	<input checked="" type="checkbox"/>	Wikidata ID	Q84708760
*			

Connected data highlights expertise





Get started with community-created, adaptable guidelines

Guidelines for Using Wikidata to Mobilize Information about People in Collections: A Paleontology Perspective



<https://doi.org/10.5281/zenodo.6977243>

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NOTE

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Introduction

Purpose of this document

The purpose of this document is to provide a framework for how to mobilize information via Wikidata about people working in and/or associated with scientific collections. Building on previous Wikidata documentation produced by

Thank you!

Get in touch...



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