

Symbiota “3.2”: More Tools for Managing and Sharing Extended Specimen Data



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Mark Fisher, Lindsay Walker, Ed Gilbert,
Samanta Orellana, Katie Pearson,
Gregory Post, Nikita Salikov, Logan Wilt,
Jenn Yost, & Nico Franz

University of Kansas Biodiversity Institute



Agricultural Research Service
U.S. DEPARTMENT OF AGRICULTURE

Demo Outline

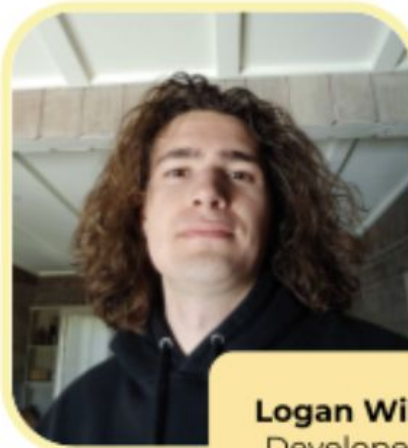
- Audio Files
- Public search for associations
- DWC-formatted export of associations and identifiers

Demo Outline

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Demo Outline

- Audio Files
- Public search for
- DWC-formatted e



Logan Wilt
Developer

ns and identifiers



The Academy of
Natural Sciences
of DREXEL UNIVERSITY

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Darwin Core Extension Alternative Identifiers

Title Alternative Identifiers
Name Identifier
Issued 2015-02-13
Namespace <http://rs.gbif.org/terms/1.0>
RowType <http://rs.gbif.org/terms/1.0/Identifier>
Description
Keywords



Darwin Core Extension Darwin Core Resource Relationship

Title Darwin Core Resource Relationship
Name ResourceRelationship
Issued 2024-02-19
Namespace <http://rs.tdwg.org/dwc/terms/>
RowType <http://rs.tdwg.org/dwc/terms/ResourceRelationship>
Description Extended support for relationships between resources in a Darwin Core Occurrence, Event, or Taxon Core to resources in an extension or external to the data set. The identifiers for subject (resourceID) and object (relatedResourceID) may exist in the dataset or be accessible via an externally resolvable identifiers.
Keywords dwc:Occurrence dwc:Event dwc:Taxon
Link <http://rs.tdwg.org/dwc/terms/ResourceRelationship>

(This is an HTML view of the definition. Use View-Source to see the underlying XML.)

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Thank You! Questions?

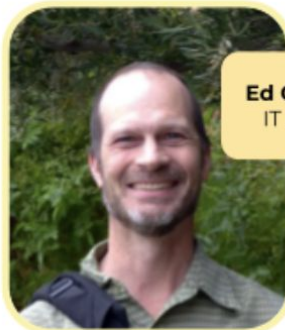


Jenn Yost
Community
Lead

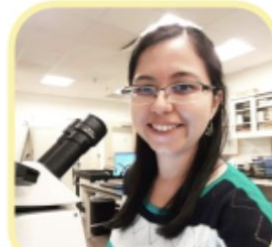
Katie Pearson
Project & Data
Manager



Greg Post
IT & System
Administrator



Ed Gilbert
IT Lead



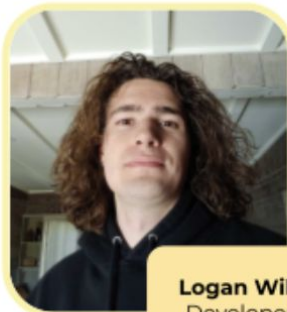
Samanta Orellana
Community Coordinator
for Latin America



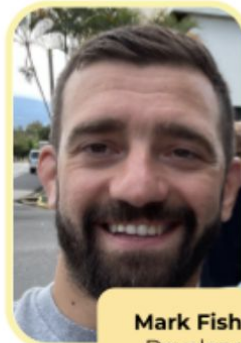
Lindsay Walker
Community
Manager



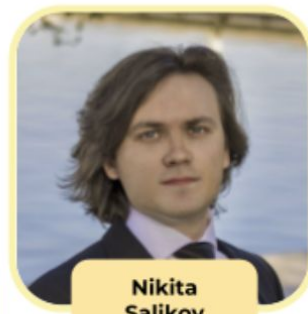
Nico Franz
Management @ KU



Logan Wilt
Developer



Mark Fisher
Developer



**Nikita
Salikov**
Developer

Back Up Slides

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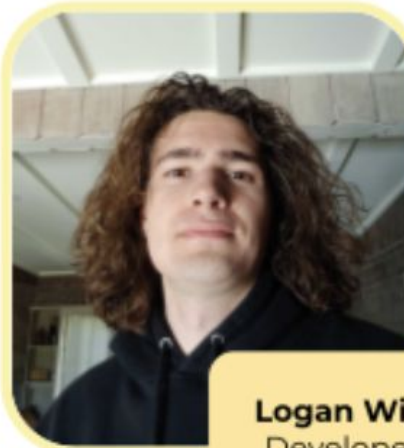
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Logan Wilt
Developer

ns and identifiers



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Occurrence Editor: CATA - Catalina Island Conservancy Herbarium Algae (CATA:Algae)

Action Status: Media added successfully

[Home](#) >> [Collection Management](#) >> [Public Display](#) >>

[Toggle Record Search Form](#)

[<](#) [<<](#) | 10 of 61 | [>>](#) [>](#) [>>](#)

Occurrence Data


Determination History

Media

Linked Resources

Traits

Admin





[Open Original File](#)

Caption:
Creator:
Notes:
Tags:
Copyright:
Source Webpage:
<https://www.inaturalist.org/observations/252425769>
Web URL: ...alist-open-data.s3.amazonaws.com/photos/451872479/large.jpeg
Original File: ...alist-open-data.s3.amazonaws.com/photos/451872479/large.jpeg
Thumbnail URL: ...alist-open-data.s3.amazonaws.com/photos/451872479/large.jpeg
Sort:

Caption: Male mating vocalization
Creator:
Notes:
Tags:
Copyright:
Source Webpage:
Web URL: ...TA_Algae/00002/mixkit-cartoon-sad-party-horn-527_3822046.wav
Original File: ...TA_Algae/00002/mixkit-cartoon-sad-party-horn-527_3822046.wav
Thumbnail URL:
Sort:

Label Processing

[Zoom?](#)

Rotate: [L](#) [R](#)

☒ Med Res.
☐ High Res.




Image 1 of 1

Tesseract OCR

☐ OCR whole image
☐ OCR w/ analysis

OCR Image

Demo Outline

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Occurrence Editor: BFRS - Blodgett Forest Research Station (BFRS)

[Home](#) > [Home](#) >> [Collection Management](#) >> [Public Display](#) >>

|< << | 8 of 523 | >> >| >* | >*

Toggle

Toggle Record Search Form

Occ

Occurrence Data

Determination History

Media

Linked Resources

Traits

Admin

Associated Occurrences

Association Type (required): internalOccurrence
Relationship (required): hostOr
Basis of Record: HumanObservation
Internal Resource: 2961081
Verbatim Scientific Name: Sorbus californica
Record ID: e2dd3a9f-bd76-4e72-a4ab-ba1db7f444c3
Entered by: unknown (2025-05-22 01:45:17)

Checklist Voucher Linkages

No checklist voucher linkages have been established

Specimen Duplicates

Search for Records to Link

Cluster Title: Rubtsoff 8134 1975-06-26

Remove from Cluster

UCR - University of California, Riverside Herbarium - Vascular Plants (UCR)

Peter Rubtsoff 8134 1975-06-26

Unlink

ASSOCIATIONS



Find all occurrences of taxa that have the following association:

Association Type
hasHost

with the following taxon:

Dataset: All Collections

Associations: Taxa that have the following association: hasHost with: *Lonicera involucrata*

Search Criteria: includes cultivated/captive occurrences



1

Page 1, records 1-1 of 1

BFRS

Sorbus californica Greene



BFRS440 Peter Rubtzoff, Herbert Sampert 7909 1974-09-19

United States, California, El Dorado, Blodgett Forest: off north side of Gaddis Creek Road just east of Gaddis Creek crossing (0.1 mi. east of Mainline Road junction) (Comp. 520R)., 38.88271493 -120.650393, 1292m

[Full Record Details](#)



Find all occurrences of taxa that have the following association:

Association Type
hostOf

with the following taxon:

Dataset: All Collections

Associations: Taxa that have the following association: hostOf with: Sorbus californica

Search Criteria: includes cultivated/captive occurrences



1

Page 1, records 1-1 of 1

BFRS

Lonicera involocrata (Richards.) Banks ex Spreng.



BFRS272 Peter Rubtzoff 8134 1975-06-26

United States, California, El Dorado, Blodgett Forest: West Fork Gaddis Creek off west side of Mainline Road 0.15 miles north of Mutton Creek Road junction (Comp. 500U), 38.88858575 -120.6525049, 1293m

[Full Record Details](#)

Occurrence Editor: BFRS - Blodgett Forest Research Station (BFRS)

[Home](#) >> [Collection Management](#) >> [Public Display](#) >>

[|<](#) [<<](#) | 10 of 523 | [>>](#) [≥](#) [>*](#)

Toggle Record Search Form

Occurrence Data

Determination History

Media



Linked Resources

Traits

Admin

Associated Occurrences



Association Type (required): observational  
Relationship (required): hostOf
Basis of Record: HumanObservation
Verbatim Scientific Name: Acer rubrum
Record ID: 89b1c5c5-659e-49df-a391-baf879f5c05f
Entered by: unknown (2025-05-23 00:22:23)

Checklist Voucher Linkages

No checklist voucher linkages have been established

Specimen Duplicates

No Linked Duplicate Records

Search for Records to Link

ASSOCIATIONS



Find all occurrences of taxa that have the following association:

Association Type

with the following taxon:

[Home](#) >> [Search Criteria](#) >> Specimen Records

Species List

Occurrence Records

Maps

Dataset: All Collections

Associations: Taxa that have the following association: any with: *Glyceria elata*

Search Criteria: includes cultivated/captive occurrences



1

Page 1, records 1-0 of 0

Your query did not return any results. Please modify your query parameters

ASSOCIATIONS



Find all occurrences of taxa that have the following association:

Association Type

Species List

Occurrence Records

Maps

Dataset: All Collections

Associations: Taxa that have the following association: any with: *Acer rubrum*

Search Criteria: includes cultivated/captive occurrences



1

Page 1, records 1-1 of 1

BFRS

Glyceria elata (Nash) M.E. Jones



BFRS405 Peter Rubtzoff, John Thomas Howell 7067 1973-07-17

United States, California, El Dorado, Blodgett Forest: Mutton Creek at crossing of Mutton Creek Road,
0.3 mi. south of County Road (Comp. 370E)., 38.89854006 -120.6412401, 1280m

[Full Record Details](#)

1

Page 1, records 1-1 of 1

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SPECIMEN/OBSERVATION

☒ Include other catalog numbers and GUIDs

Catalog Number

SBBG235621

Separate multiple with commas or provide ranges with a dash.

- ☐ Limit
- ☐ Limit
- ☐ Limit
- ☐ Limit
- ☐ Limit
- ☒ Include

	Collector / Observer ?	Number ?	Date (start) ?	End Date ?
	June Hopkins		1957-05-21	
	Associated Collectors ?	Verbatim		
				May 21, 1

Data Usage Guidelines

By downloading data, the user confirms that he/she has read and agrees with the general [data usage terms](#). Note that additional terms of use specific to the individual collections may be distributed with the data download. When present, the terms supplied by the owning institution should take precedence over the general terms posted on the website.

Download Specimen Records

Structure:

☐ Symbiota Native ?

☒ Darwin Core ?

Data Extensions:

☐ include Determination History

☐ include Media Records

☐ include Occurrence Trait Attributes

☒ include Alternative Identifiers

☒ include Resource Relationships (associations & linked resources)

*Output must be a compressed archive

File Format:

identifiers					
coreid	identifier	title	format	recordID	initialTimestamp
5799268	75538	SBBG_old			2023-05-03 16:06:19
5799268	5496	SBM			2023-05-03 16:06:19

wnloads

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ASSOCIATIONS ?



Find all occurrences of taxa that have the following association:

Association Type
Any

with the following taxon:

Taxon
Acer rubrum

Taxon type
Scientific name

☒ Associations-Include Synonyms

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☒ include Media Records
☒ include Occurrence Trait Attributes
☒ include Alternative Identifiers
☒ include Resource Relationships (associations & linked resources)
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File Format:

- ☒ Comma Delimited (CSV)
☐ Tab Delimited

Character Set:

- ☒ ISO-8859-1 (western)
☐ UTF-8 (unicode)

id	institutionCode	collectionCode	ownerInstitutionCode	collectionID	basisOfRecord	occurrenceID	catalogNumber	scientificName	taxonID	scientificNameAuthorship	genus
2960961	BFRS			739182be-72d9-41f6-ac50-066a3c22632f	PreservedSpecimen	05c874b8-138c-46e1-a4de	BFRS405	Glyceria elata	141405	(Nash) M.E. Jones	Glyceria

resourceRelationshipID	resourceID	relationshipOfResourceID	relatedResourceID	relationshipOfResource	relationshipAccordingTo	relationshipEstablishedDate	relationshipRemarks	scientificName
89b1c5c5-659e-49df-a391-baf879f5c05f	05c874b8-138c-46e1-a4de			hostOf				Acer rubrum

Thank You! Questions?



Jenn Yost
Community
Lead

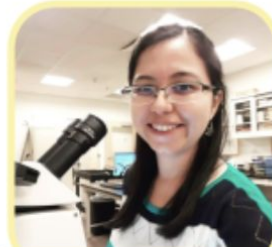
Katie Pearson
Project & Data
Manager



Greg Post
IT & System
Administrator



Ed Gilbert
IT Lead



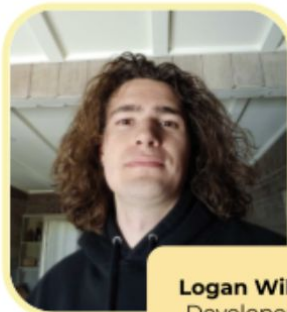
Samanta Orellana
Community Coordinator
for Latin America



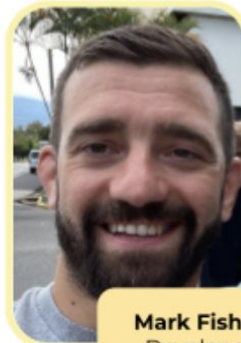
Lindsay Walker
Community
Manager



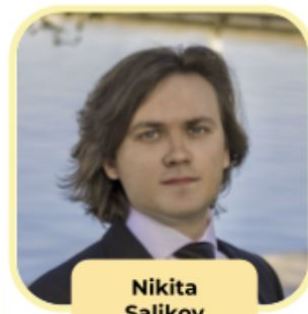
Nico Franz
Management @ KU



Logan Wilt
Developer



Mark Fisher
Developer



**Nikita
Salikov**
Developer