

Fables of the How's & Where's

Standardizing 'Resource Relationship' Fields in EMu



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Kate Webbink

Terrestrial Parasite Tracker
Workshop
February 2020



Belling the Cat

*It is one thing to say that something should be done,
but quite a different matter to do it.*



“Resource Relationship” extension:

dwc.tdwg.org/terms/#resourcerelationship

1. *resourceID (occurrenceID)*
2. *relationshipOfResource*
3. *relatedResourceID*
4. *scientificName*
5. *relationshipRemarks*
6. *relationshipAccordingTo*
7. *relationshipEstablishedDate*
8. *resourceRelationshipID*



<http://read.gov/aesop/003.html>

+ Tenniel illustrations from Wonderland

intro “Resource Relationship” extension = **Bell** we should use

- <https://dwc.tdwg.org/terms/#resourcerelationship>



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Relationship Data:

“Resource Relationship” extension:

dwc.tdwg.org/terms/#resourcerelationship

occurrenceID

Relationship type

Related GUID

Related Taxon ID

‘Remarks’ Notes...

‘Observer’ Notes?

‘Date’ Notes?

ID TBD

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“Resource Relationship” extension = Bell we should use ...

Intro Relationship Data = [Cats](#) we should herd/bell ...

...HOW



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Relationship Data:



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Related GUID
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'Remarks' Notes...
'Observer' Notes?
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ID TBD

Current EMu Fields:

DarGlobalUniquelIdentifier

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“Resource Relationship” extension = Bell we should use ...

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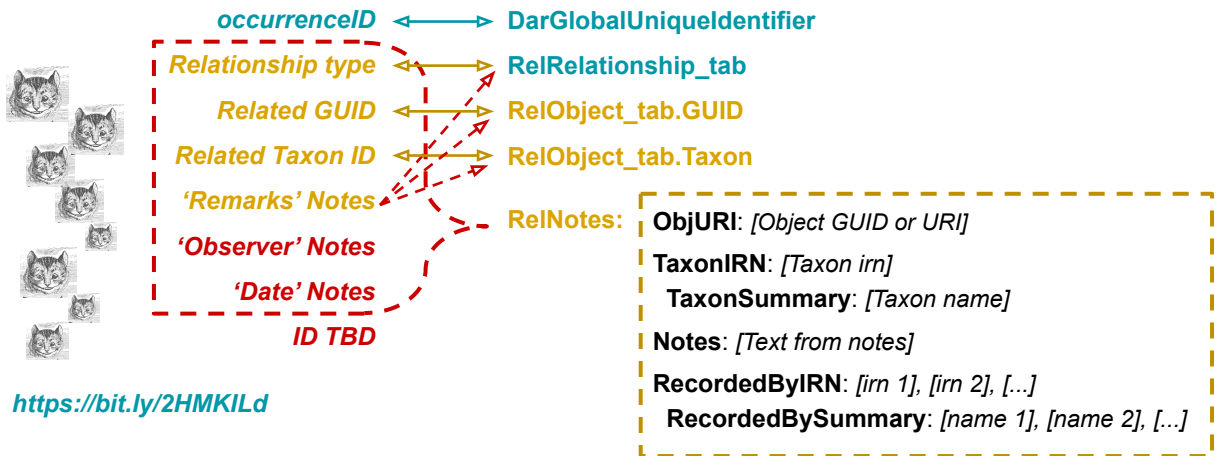
...HOW

Herding some cats ... Ringing some bells

(Associations Tab)

Current Relationship Data

Current EMu Fields



“Resource Relationship” extension = Bell we should use ...

Relationship Data = Cats we should herd/bell ...

...intro **HOW**:

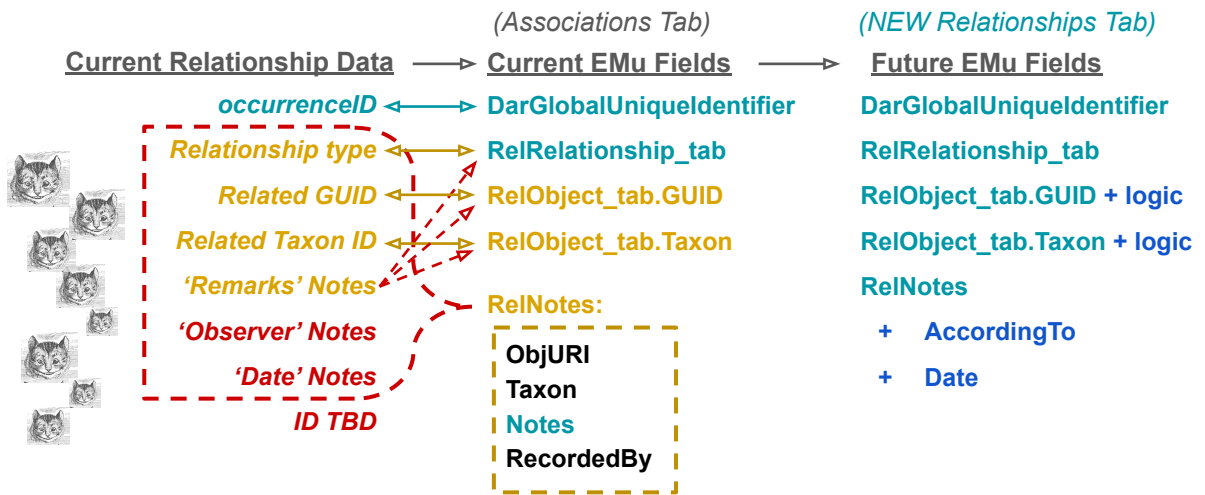
Data prep for publishing as a Related Resource extension

- https://docs.google.com/document/d/190msXilYgui4zReB4O8-IQXq4Gue0GqQZU3wMCZG_jo/edit#heading=h.7b1bxqsu8auz
- Retrieve the Catalogue records for specimens that are 1) included in a corresponding Darwin Core dataset and 2) have ‘related resource’ data set up as described in the “[Relationship Workflows](#)” section.
- Report the records out of EMu with the “Related Resource” CSV report from step 1.
- Run the “Group1.csv” through the “[IPTrr_PreDev.R](#)” script. ([Online version of script is here](#))
- Zip up the CSV and add it to the corresponding DwC resource on the IPT.

e.g. - https://fmipt.fieldmuseum.org/ipt/resource?r=fmnh_insects

- + Set up a DwC Resource Relationship dataset (EMu-report + data-mangler-script)
- + IPT - adding extension to existing resource [+ mapping to Resource Relationship DwC ext]

Herding some cats ... Ringing some bells



<https://bit.ly/2HMKILd>

HOW:

Data prep for publishing as a Related Resource extension

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+ Relationship DwC ext]

Current consolidated FMNH EMu fields & data structure:

The screenshot shows a web application window with the following content:

File Edit Select View Tools Tabs Parts Multimedia Window Help

Insects (Bat Flies) : Diptera : Penicillidia (Penicillidia) fulvida (Bigot, 1885) : FMNHINS 181082 181082

Is Parent? Yes No Child Parent Object:

Child Objects

Related Objects

Object	Relationship
1 FMNH 83596 - Rhinolophus fumigatus aethiops - F...	Ectoparasite Of
*	

Notes: Count: NULL | ObjURI: 7048675a-b110-4baf-91a3-2db138316709 | RecordedByIRN: NULL | RecordedBySummary: NULL | TaxonIRN: 337571 | TaxonSummary: Artiodactyla | Notes: Ecto

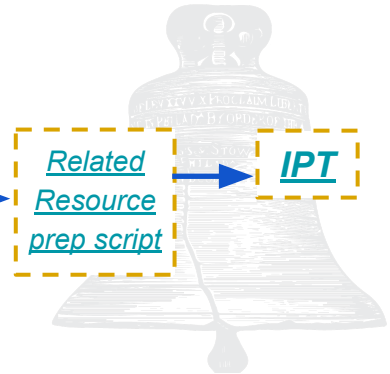
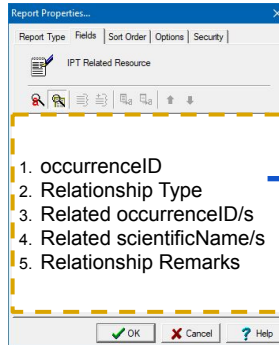
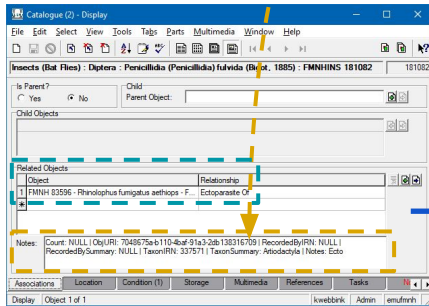
Associations Location Condition (1) Storage Multimedia References Tasks

Display Object 1 of 1 kwebbink Admin emufmnh

Current consolidated FMNH EMu fields & data structure

Bells? Volunteers?

Count: NULL | ObjURI: NULL | RecordedByIRN: NULL | RecordedBySummary: NULL |
TaxonIRN: 310583 | TaxonSummary: Artibeus lituratus | Notes: Ecto



<https://bit.ly/2HMKILd>

If data is set up following the “Count: ... | ObjURI: ... | etc” structure shown above, can use the workflow shown here.

1. In EMu / Catalogue set up an CSV report:
 - a. Include these fields (listed by their backend column names):
 - i. irn
 - ii. DarGlobalUniqueID
 - iii. RelRelationship_tab
 - iv. RelNotes

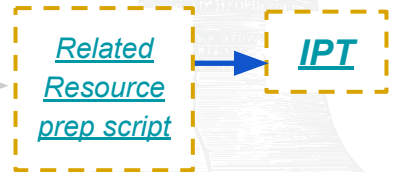
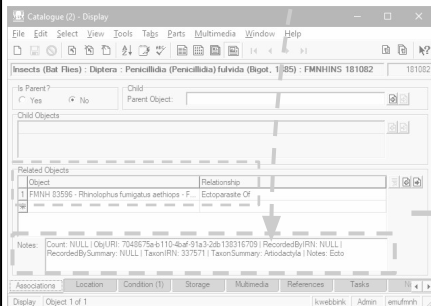
And these fields from records attached in RelObjectsRef_tab

- v. RelObjectsRef_tab.**DarGlobalUniqueIdentifier**
 1. Relabel this field "**relatedResourceID**"
 - vi. RelObjectsRef_tab.**DarScientificName** (Object -- Scientific Name)
- b. Make sure to add them to a group labeled “**Group1**”
 - c. The report properties should look like this:

Bells? Volunteers?

Live/Un-Dead Demo?

Count: NULL | ObjURI: NULL | RecordedByIRN: NULL | RecordedBySummary: NULL |
TaxonIRN: 310583 | TaxonSummary: Artibeus lituratus | Notes: Ecto



<https://bit.ly/2HMKILd>

Demo of [Reporting out/Setting up a Related Resource extension dataset](#):

1. From EMu/CMS, report out records with "Related Resources", using "IPT Related Resource" report
e.g. - <https://github.com/fieldmuseum/EMu-IPT-Prep/blob/master/sampleData/relationships/Group1.csv>
2. Upload "**Group1.csv**" to [Related Resource data prep](#) script (or run [this script locally](#))
3. Check "processed" CSV output from script.
 - a. Fix any issues / Re-run as needed
4. When all good, upload to/package with corresponding IPT DwC resource.
e.g. - https://fmipt.fieldmuseum.org/ipt/resource?r=fmnh_insects

The Frog & the Ox

Don't be an exploding frog.

(Publish early; publish often)



Map data to “Resource Relationship” ext

<https://bit.ly/2HMKILd>



Export data [from EMu]

Related Resource prep script

Publish [& update] data

- a. IPT DwC resource
- b. IPT Resource Relationship extension

Example-dataset here:

https://fmipt.fieldmuseum.org/ipt/resource?r=fmnh_insects



<http://read.gov/aesop/003.html>

- [exploding toads](#)
- Tenniel [bull](#)

Data prep for publishing as a Related Resource extension

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- + Set up a DwC Resource Relationship dataset (EMu-report + data-mangler-script)
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Starter-dataset is published here:

- https://fmipt.fieldmuseum.org/ipt/resource?r=fmnh_insects
 - Includes ~27900 specimens with parasite relationships to a “taxon”
 - Will add specimen-specimen parasite relationships with next update

The Ass & His Shadow

In quarreling about the shadow we often lose the substance.

- *Don't overthink the controlled vocabularies. The data will inform the lists as long as there is a set general rules standardizing forms of words (e.g. tense, form, length, etc.)*
- *Don't over analyze the authority files, let them do the work for you.*



<http://read.gov/aesop/135.html>

Don't over think vocabs and authority files.

- A nice one for don't-overthink-vocabs might also be "the astrologer" / <http://read.gov/aesop/100.html>



The Shepherd & the Lion

We are often not so eager for what we seek, after we have found it.

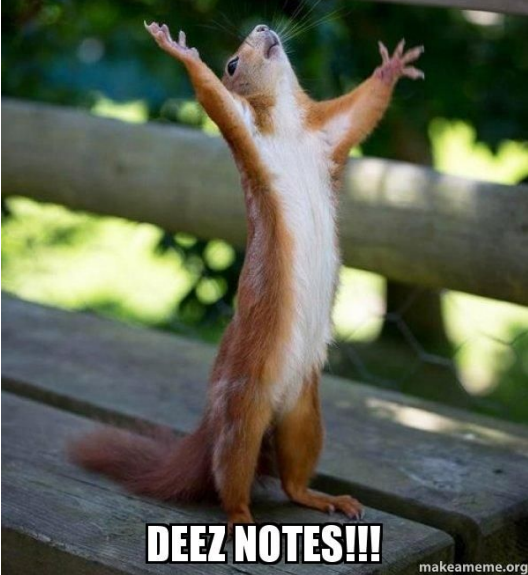
- Do you have [existing relationship tables](#)? (could be host/parasite, could be previous or other number, could be related specimen)
- Check your [habitat fields](#) (and microhabitat fields if you've got them)
- Check all your [notes fields](#). Doesn't matter if it doesn't make sense to you, it likely made sense to someone. (I found them in these kinds of notes fields: Ecology, Habitat, Label notes, Legacy, Miscellaneous, Original notes, Rapid reference collection - off notes, [Taxonomy](#), [Collection Events](#), Sites.)
- Finally, check specimen labels, field notes and catalogs.



<http://www.read.gov/aesop/131.html>

Use for where to look in your data for existing relationship data.

**YOU KNOW WHAT ELSE IS
IMPORTANT?**



DEEZ NOTES!!!

makeameme.org

Catalogue (2) - Display

File Edit Select View Tools Tabs Parts Multimedia Window Help

R: FMNH 1926 - *Thamnophilus fulvus* - Jan 1906 - North America: - stomach_alc 1829064

Is Parent? Yes No Child Parent Object: []

Child Objects [] Child Count: []

Relationship	Object	URI	Repository	Remarks	Taxon	Accord.	Count	ID
1	Has Stomach Con... R: FMNH 30432				Thamno...		1	3a2...
2	Has Stomach Con... R: FMNH 30433				Thamno...		1	ab1...
3	Has Stomach Con... R: FMNH 30434				Thamno...		1	9c6...

Notes: 3 transferred to FMNH 30432-34. Stomach contents removed by A. de Queiroz, Aug 2003.

Genetics Loan History Deaccession References Notes Lot History Relationships Refer

[EMu Related Data Proposal](#) for EMu community/AHA

<https://bit.ly/2SX10aK>

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<http://www.read.gov/aesop/about.html>

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