Online direct import of specimen records from iDigBio infrastructure into taxonomic manuscripts

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PENSOFT

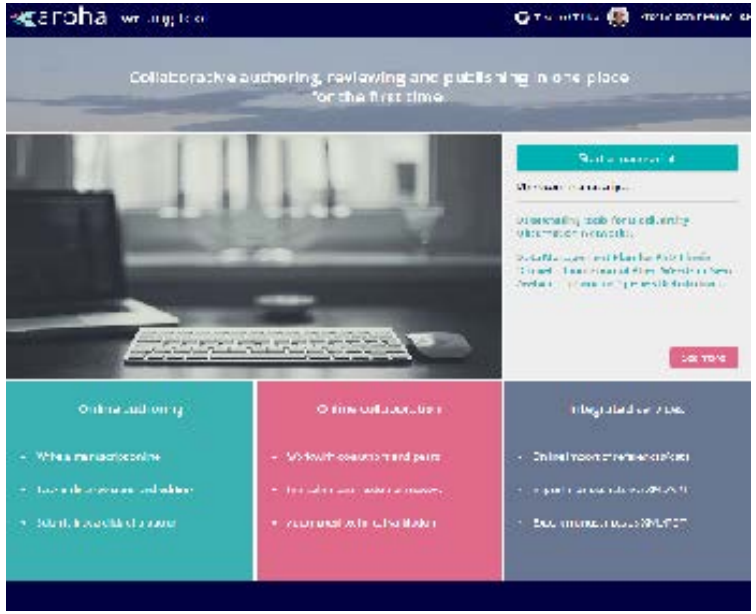
iDigBio Integrated Digitized Biocollections

EU BON

BIG4 Biosystematics, Informatics, Genomics

Data deluge: We sample now more data than we can digest (analyze, publish & use)

ARPHA Writing Tool & Biodiversity Data Journal
facilitate data publishing & re-use



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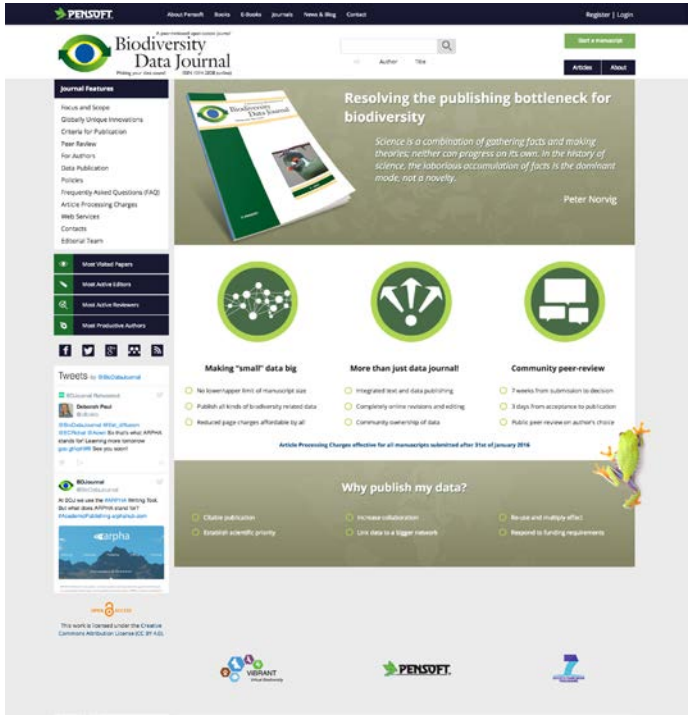
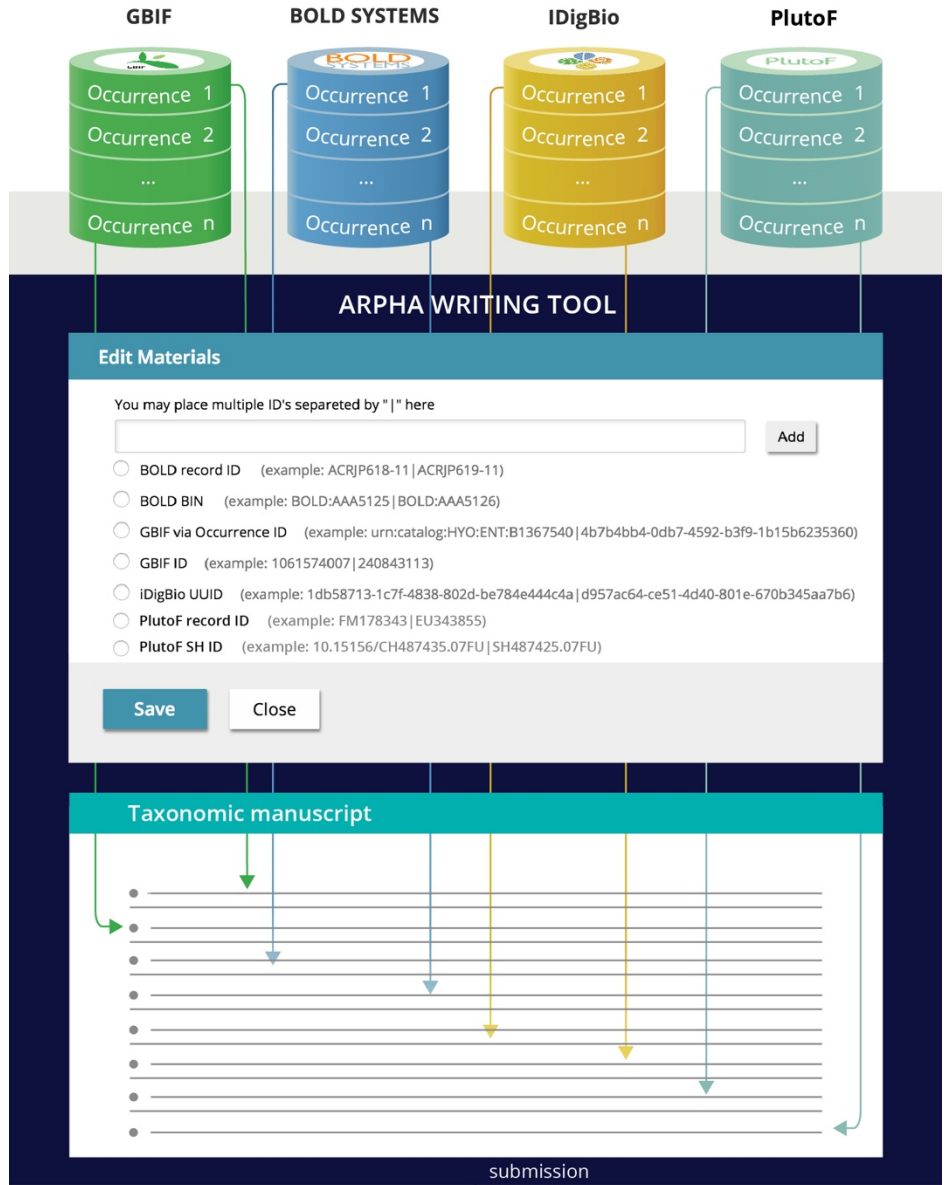


- Data import
- Authoring
- Peer-review
- Publication
- Dissemination

All within a single online collaborative platform!

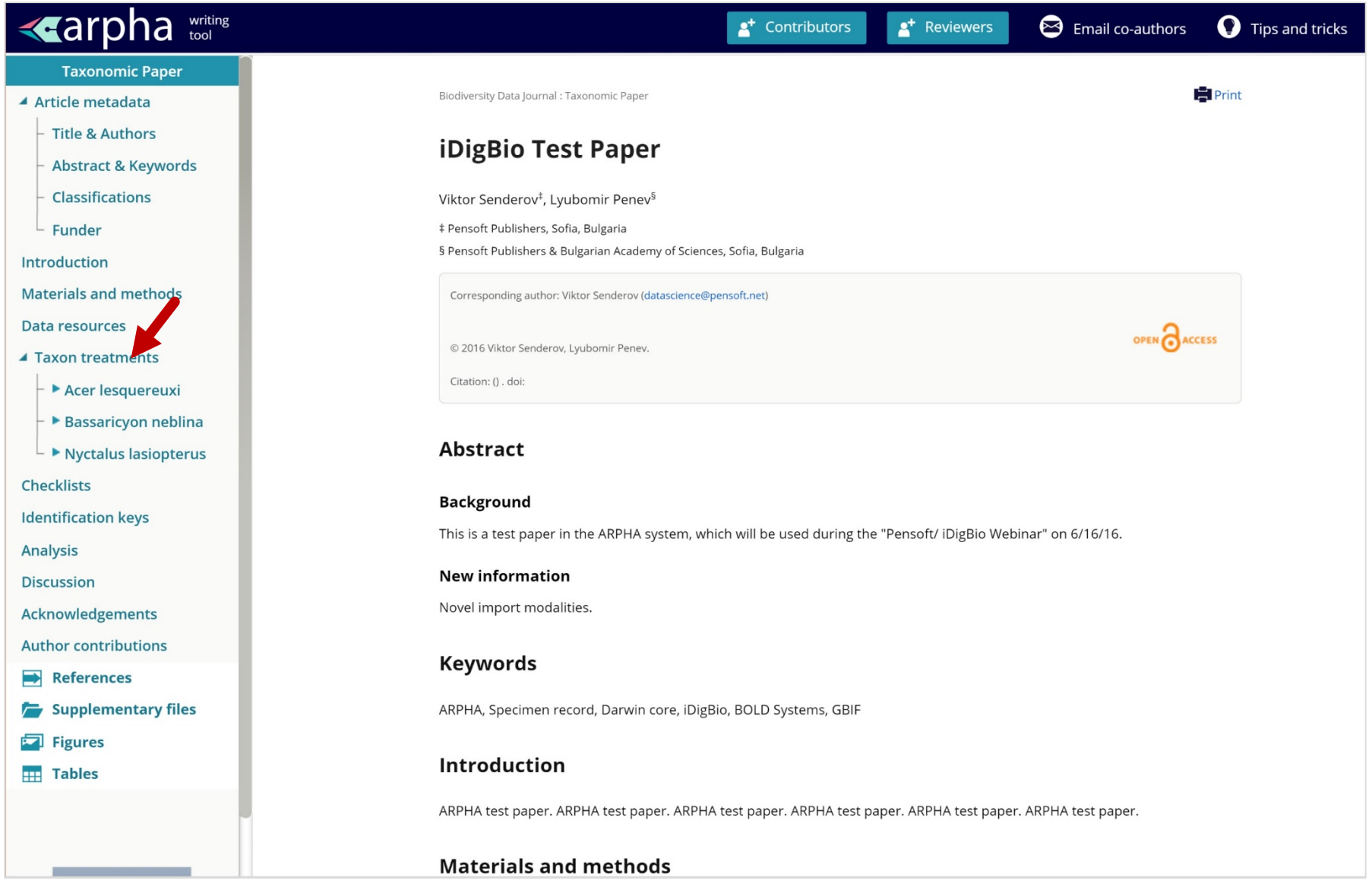
Online import of occurrence records directly into a manuscript!



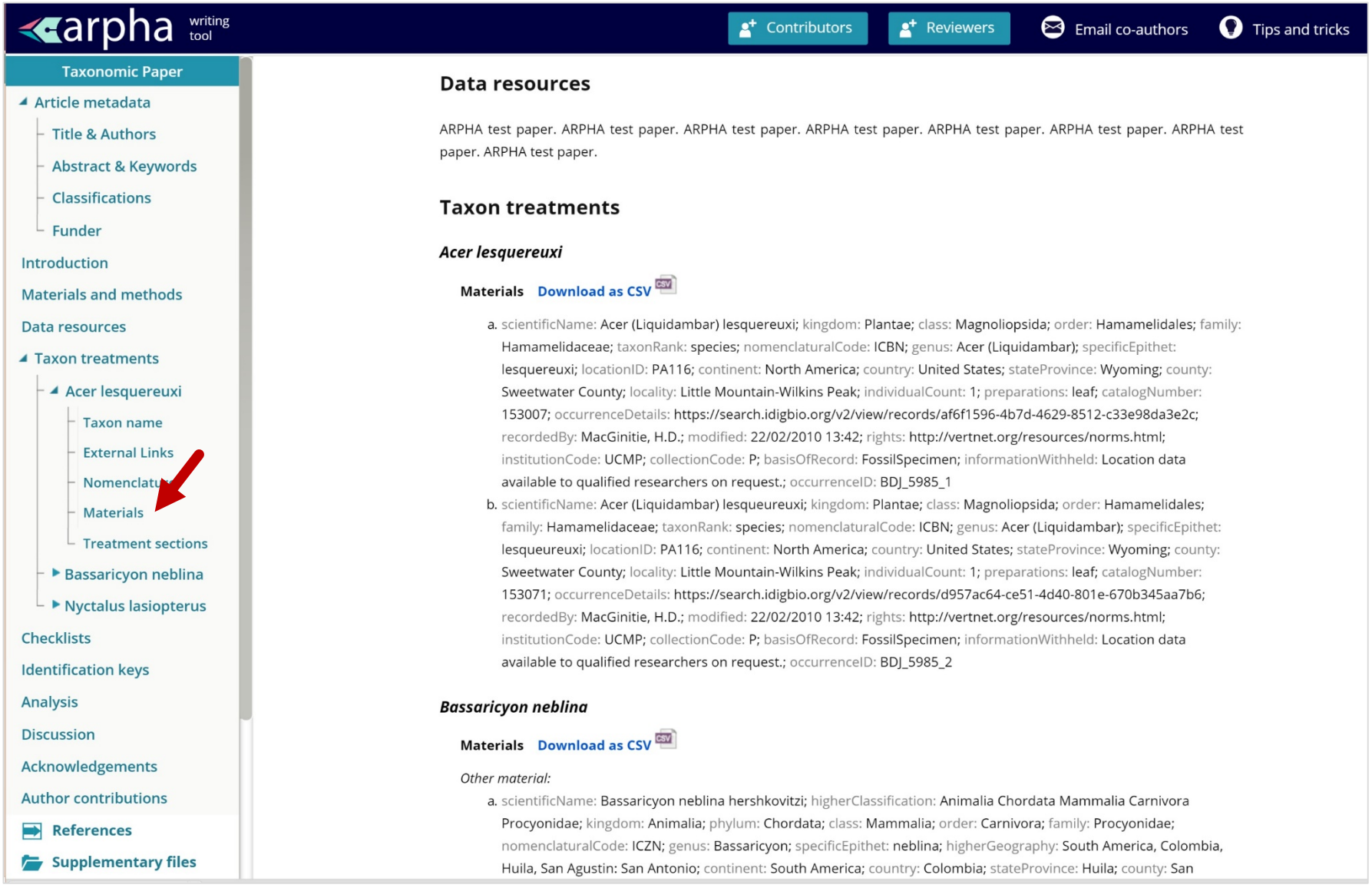
Biodiversity Data Journal

http://bdj.pensoft.net

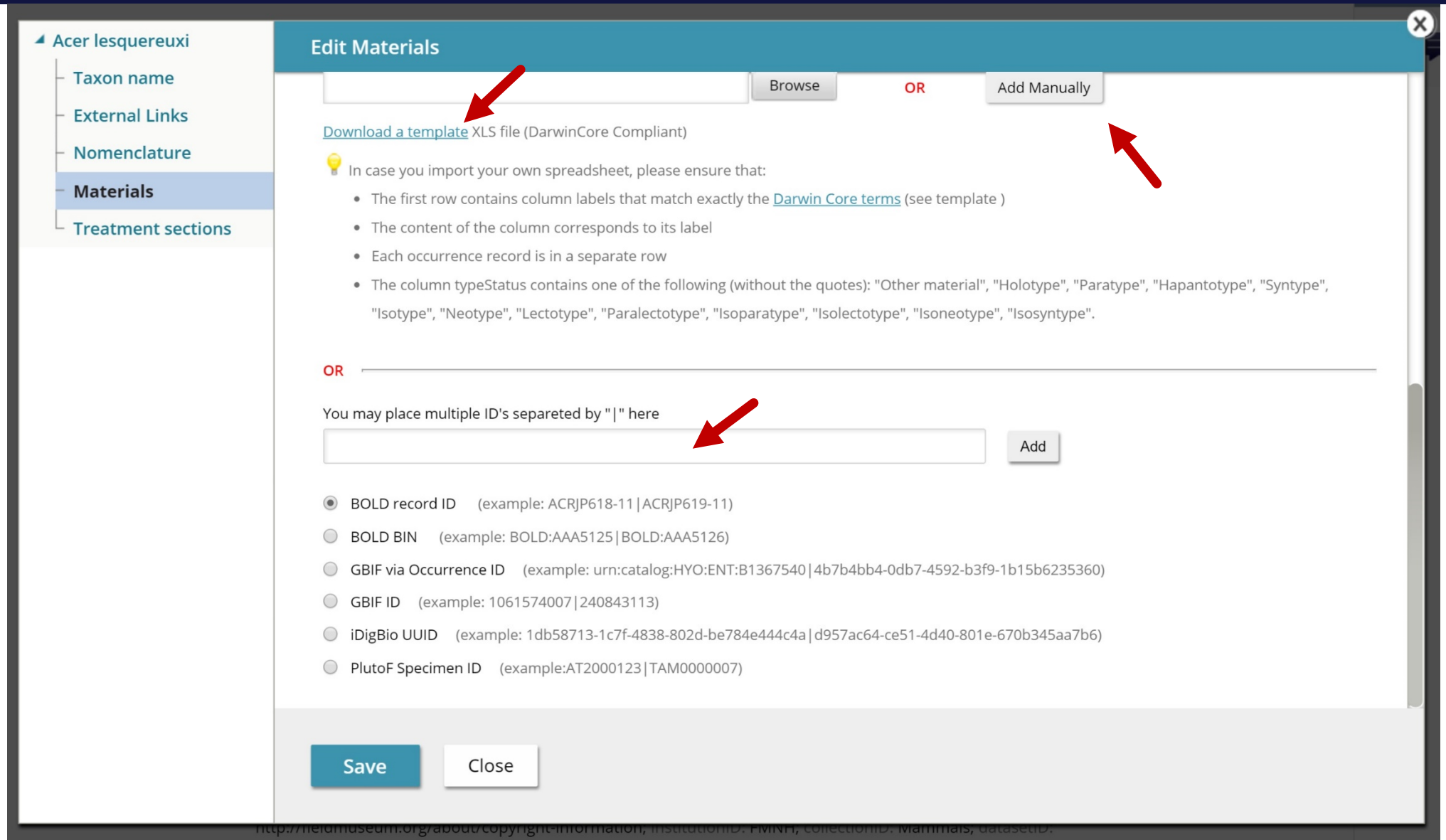
Step 1: Start a taxonomic manuscript in ARPHA, and open a taxon treatment



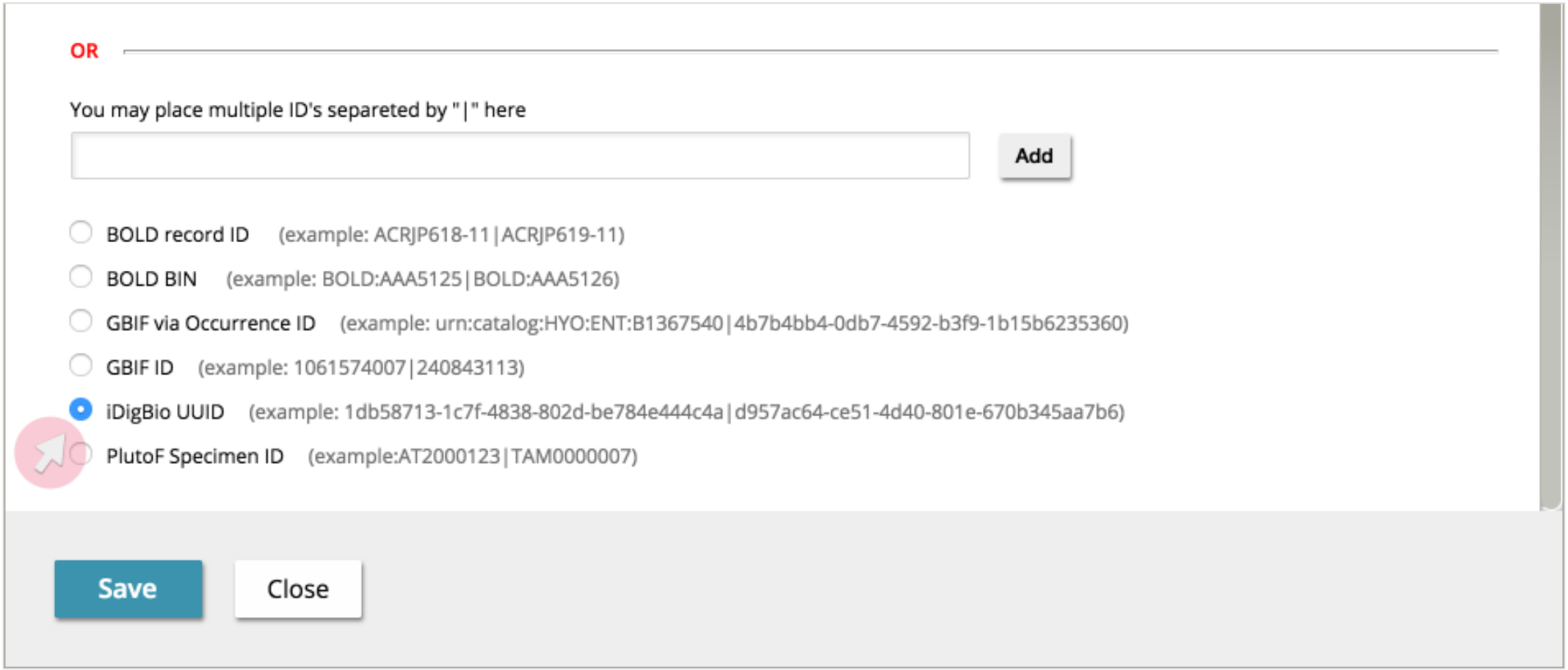
Step 2: Click at the Materials section within the treatment



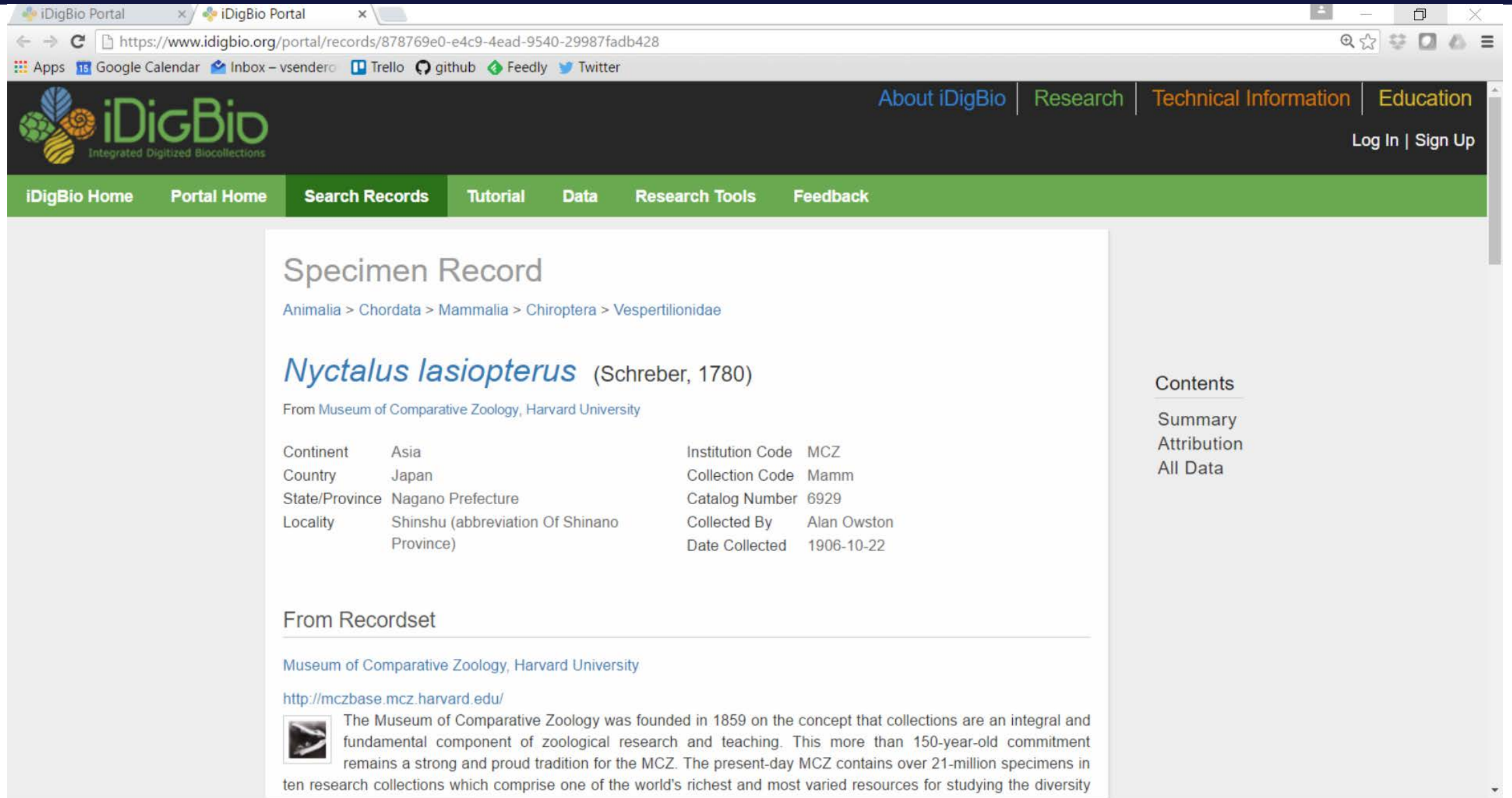
Step 2: Three ways to import specimen occurrence records into a manuscript



Step 3: Import from iDigBio (or GBIF, or BOLD, or PlutoF) using record ID(s)



Where to take record IDs from iDigBio?



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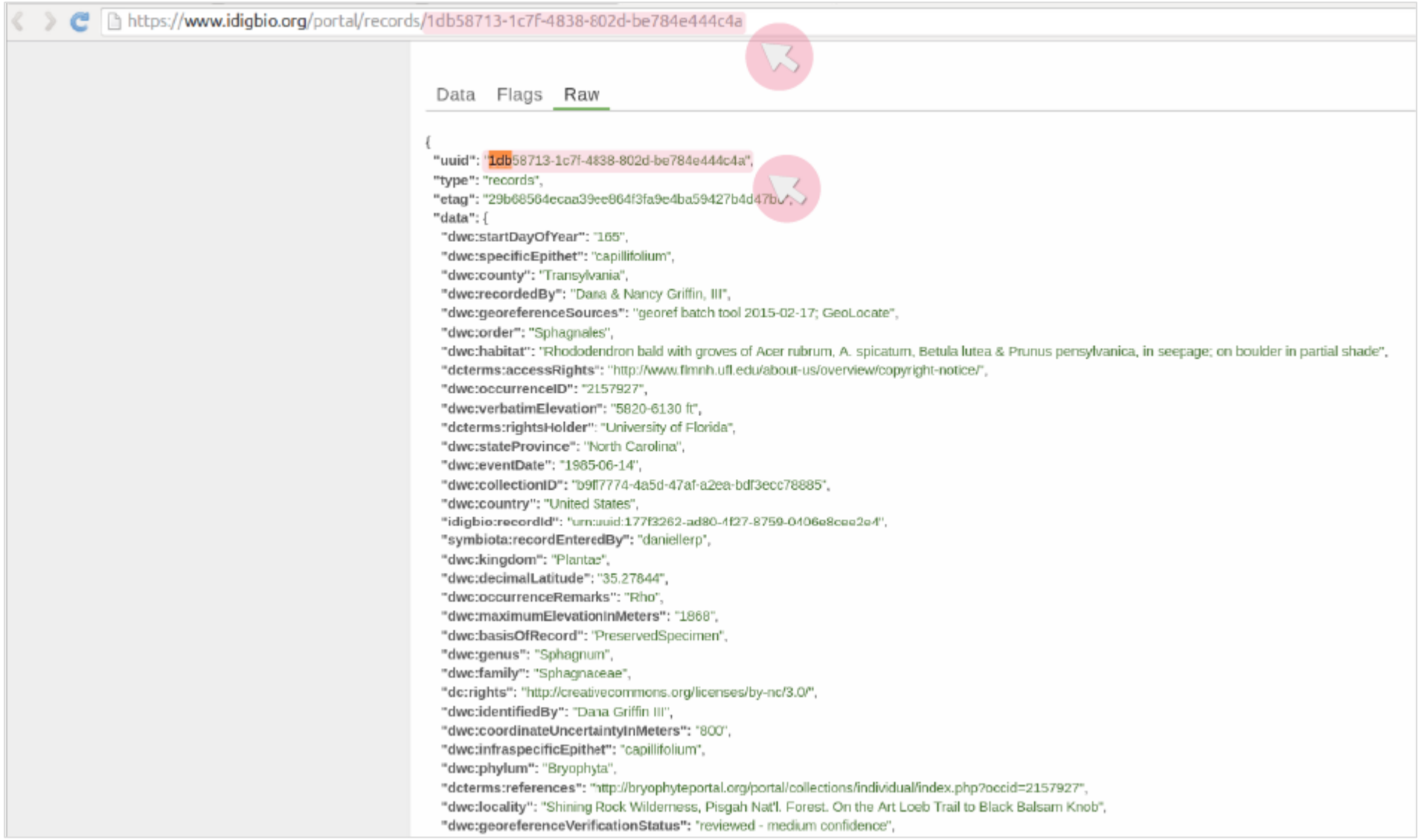
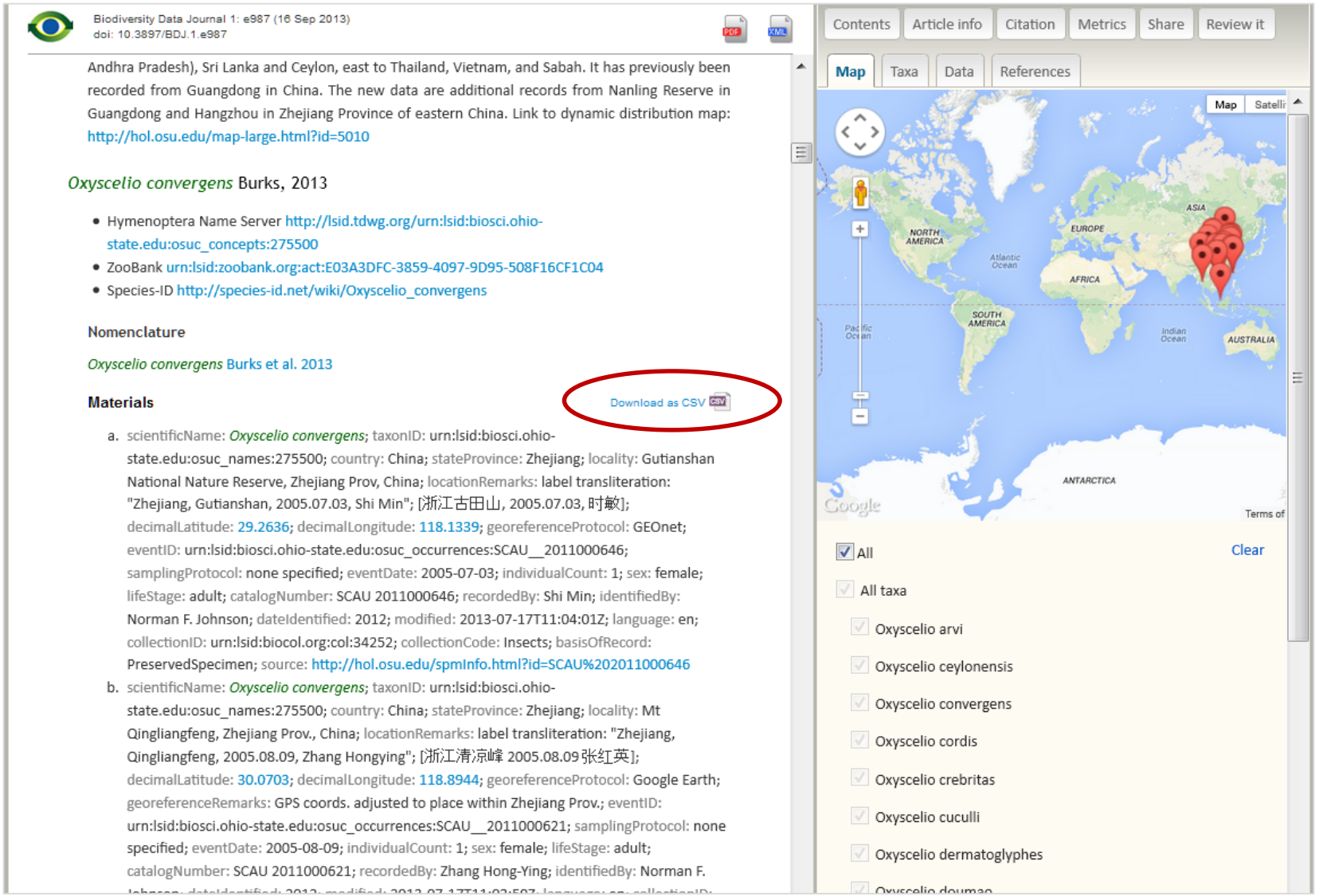


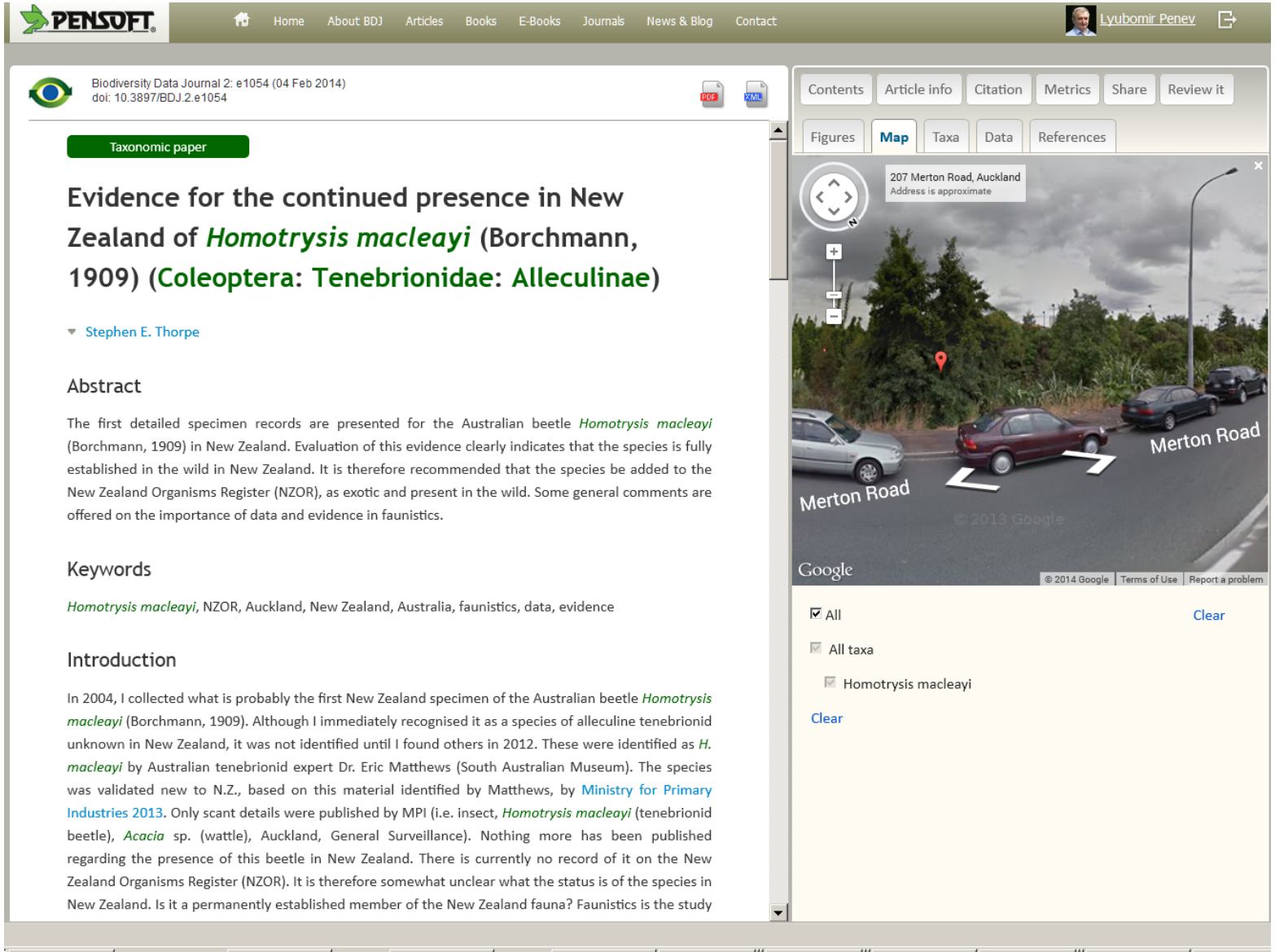
WHY import & publish specimen records in this way?

- Avoid re-typing errors and save time
- Tracking (provenance) information is saved in *occurrenceDetails*
- Mobilization, peer-review and publication of small data
- Data downloadable anytime as CSV file
- Machine-readable and harvestable (from the XML version of the published article)
- Automatically exported in Darwin Core Archive
- Automatically exported to and indexed by GBIF on the day of the publication
- Interoperable in DarwinCore standard
- Re-usable (new opportunities for collaboration)
- Increase discoverability, visibility, and citation of authors' work

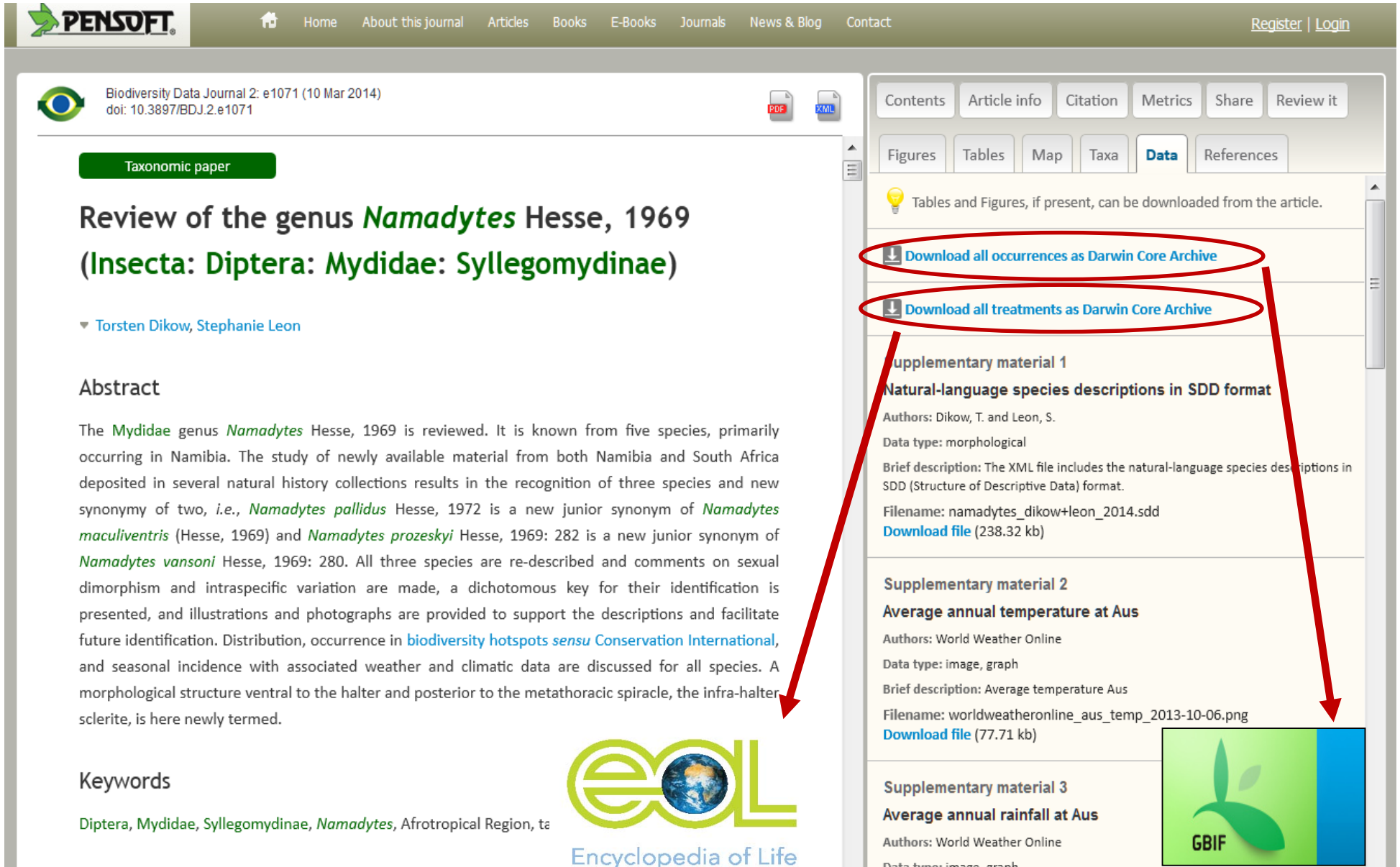
This is how data look like in the published paper



Mapping & visualization



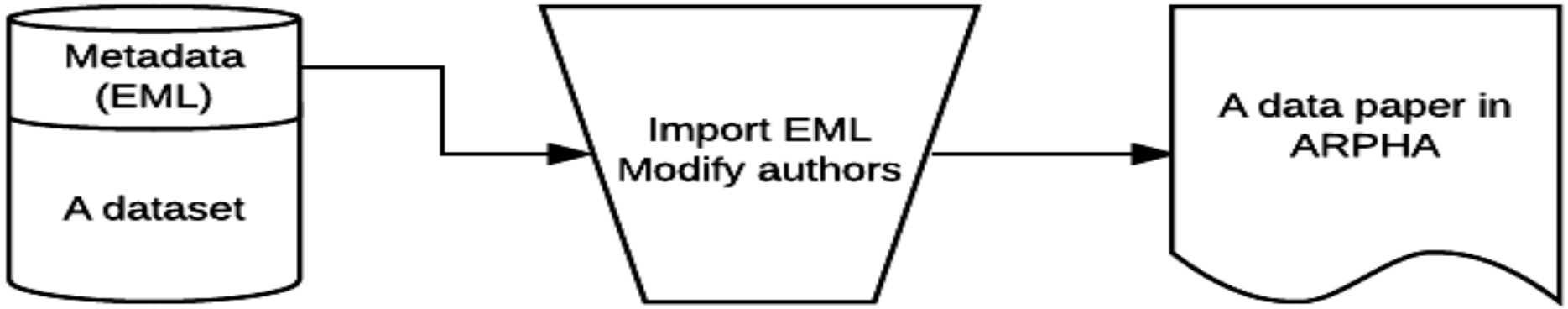
Easy export, harvesting & re-use



Live demo

- Data : https://docs.google.com/spreadsheets/d/1dpzq54F9LmjQZG9Ljuh5-V3shRBaQOnql5HHqSs1mYQ/edit?usp=sharing
- Open “iDigBio Test Paper”
- Import specimens for Acer lesquerexi (some sort of prehistoric plant) – just click on most recent things
- Import specimens for Bassaricyon neblina (raccoon-like mammal)
- Import specimens for Nyctalus lasiopterus (a bat species)
- Show how to delete materials, import bulk with “|”, import from BOLD BIN

Can we generate and import an entire manuscript?



DataONE

GBIF

LTER

Name	Email	Include	Is Submitting
Viktor Senderov	datascience@pensoft.net	☑	◉
NoName PleaseChange	NoName@PleaseChange.This	☐	○
Oscar Schofield	oscar@marine.rutgers.edu	☐	○

Submit

Biodiversity Data Journal : Data Paper (Biosciences) Print

Photosynthetic pigments of water column samples analyzed using High Performance Liquid Chromatography (HPLC), sampled during Palmer LTER field season at Palmer Station Antarctica, 1991 - 2009.

Oscar Schofield ‡

‡ Rutgers University, .,

Corresponding author: Oscar Schofield (oscar@marine.rutgers.edu)

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Citation: () . doi:

OPEN ACCESS

Live demo

- https://search.dataone.org/#view/https://pasta.lternet.edu/package/metadata/eml/knb-lter-pal/130/2

- Photosynthetic pigments of water column samples analyzed using High Performance Liquid Chromatography (HPLC), sampled during Palmer LTER field season at Palmer Station Antarctica, 1991 - 2009.. U.S. LTER Network.

For developers and data managers: Pensoft API

- http://arpha.pensoft.net/dev/

- Allows to import different types of manuscripts from XML. E.g.:
  - Software Description
  - Taxonomic Paper
  - Data paper

- For collaborations please contact us at info@pensoft.net

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- Pensoft developers team
- European Commission: EUBON FP7 Project
- European Commission: PhD Financed through the EU Marie-Sklodovska-Curie Program Grant Agreement Nr. 642241
- Slavena Peneva (drawings and design)

iDigBio Integrated Digitized Biocollections

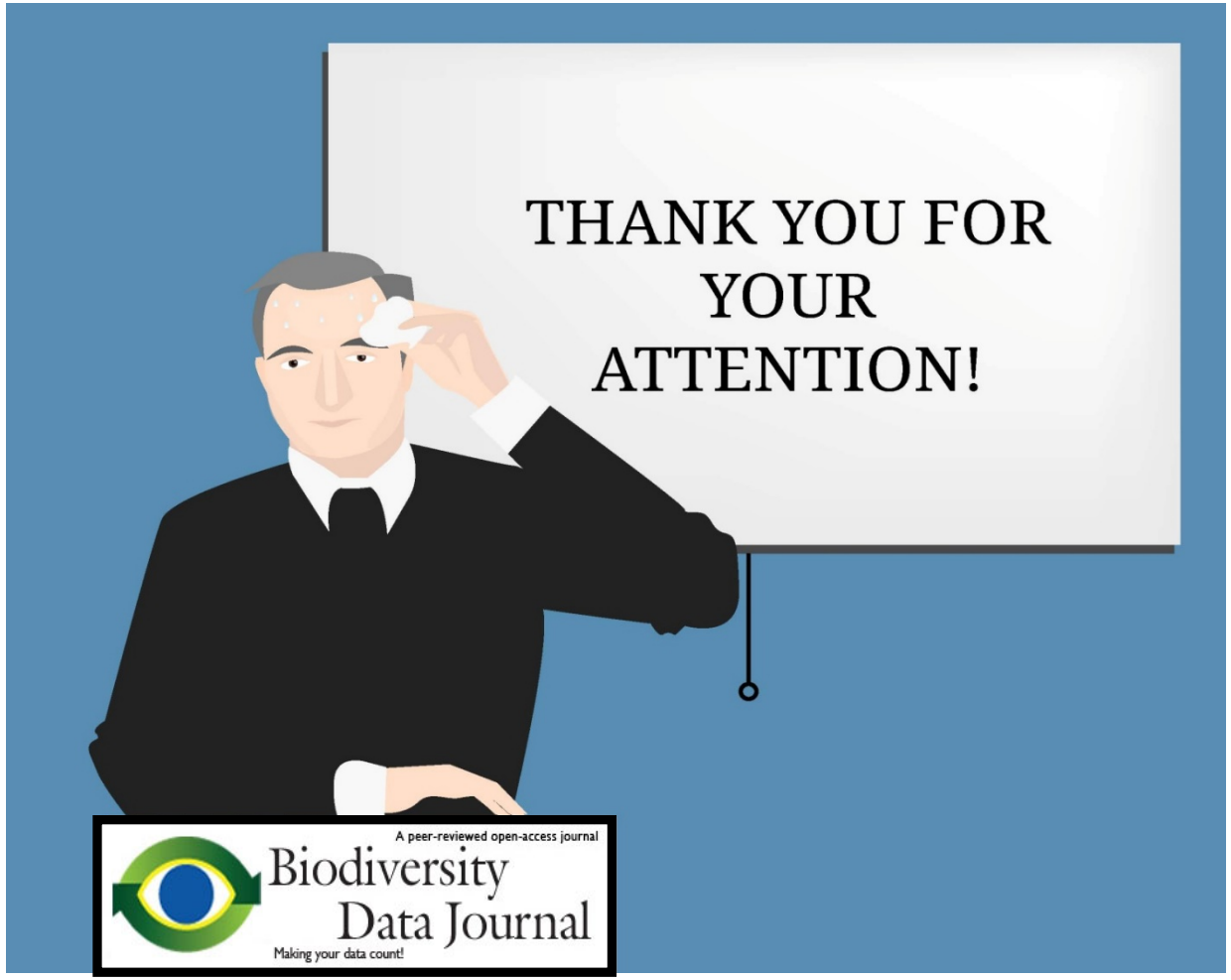
GBIF

BOLD SYSTEMS

PlutoF

EU BON

I ♥ Open Science!



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