Welcome to your guide for creating an entry for your project in the metaGRIL, hosted on the Scholars Portal Dataverse.

Please prepare your entries according to the step-by-step guide below. Remember to advise your supervisor of your metaGRIL entry and be sure to include them as the primary contact person (with email) as per point #4 below. The full procedure (including screenshots) can be downloaded as a PDF.

Les instructions sont en anglais avec l'idée que les entrées de métadonnées (mots clés, noms des variables, titres des articles etc.) seront faites en anglais pour être découvrables par la communauté scientifique internationale.

Contact Frédérique Bélanger-Lépine (frederique.belanger-lepine@umontreal.ca) if you encounter difficulties.

Good luck!!

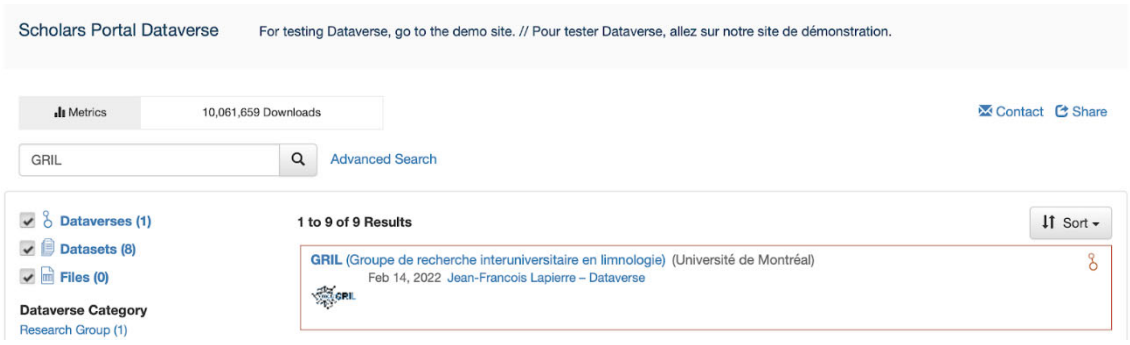
Step 1: Authentication

1. Go to : https://borealisdata.ca

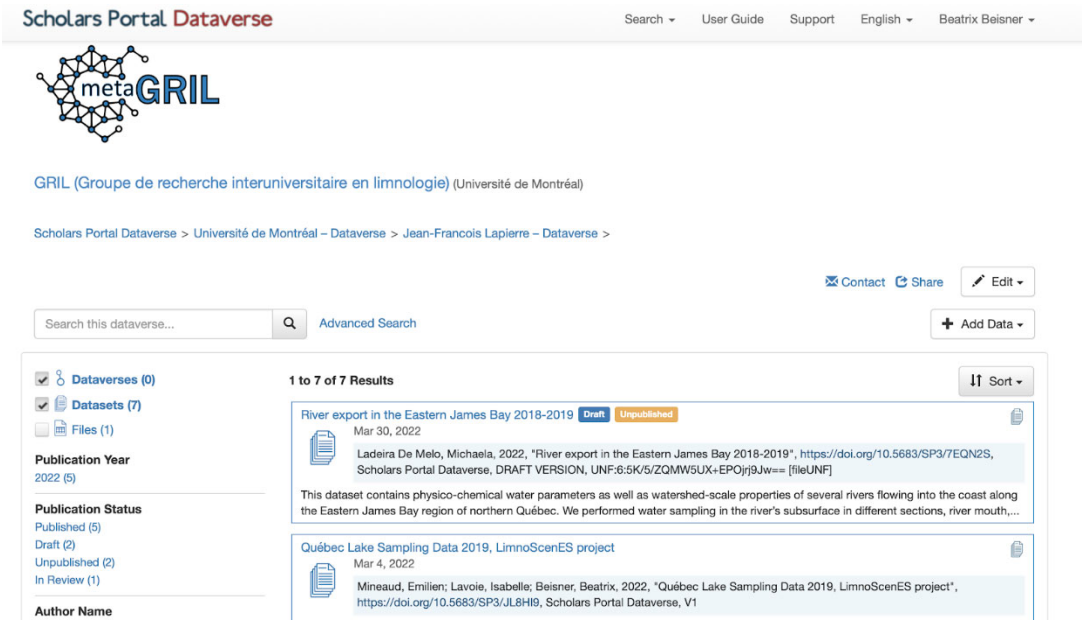
2. Click on " LOGIN" by selecting your university and using your university credentials.

-NOTE: If your university is not listed, you will be able to sign up with your institutional email by clicking the button below "Institution not listed?"

3. Once you are logged in, select Search in the top panel and "Search all databases". Search for GRIL. You should see something resembling the following:

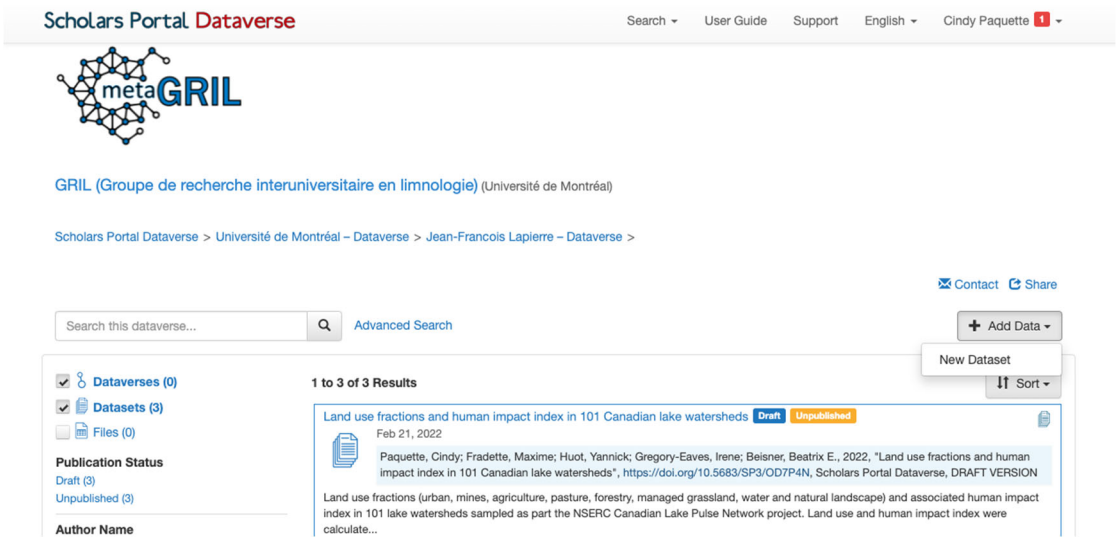


4. Select the result that appears as above: GRIL (Université de Montréal). You will now be in the metaGRIL space and should see the logo as well as the entries to date.



Step 2: Creating your dataset page

1. **Click on « + Add data » box** on the right hand-side of the window and select: New dataset



Please **fill this form in English** to ensure uniformity of text elements used to refine the search across all datasets. The exception is for **location names** that can be entered in the local language, e.g. Laurentides, QC

2. Title

A descriptive title of the dataset. The title should provide enough information (at least what, where, and when) for someone casually scanning a list of dataset titles to know whether the data are relevant to them. This implies that the data context should be indicated in the title without making the title too long. In general, the title should indicate what kind of data were collected and the spatial, taxonomic, and temporal extents the dataset covers.

Examples of descriptive titles:

- Boreal Québec Lake Zooplankton Data from 1972 to 1988.
- Tassajara Hot Springs Reserve Water Chemistry Data from 1990 to 2000.

Examples of incomplete titles:

- Zooplankton Data
- Water Chemistry Data

*(**Other title**: Titre en français/Title in French)

3. Author(s)

Name: Last name, first name
Affiliation: University
Identifier Scheme: Enter ORCID*
Identifier: Enter ORCID ID

Click on "+" to add authors

**If you haven't already done so, please obtain an ORCID ID number from their site. Ideally, also make your publications and other works visible all.*

4. Contact

The person to be contacted for more information on the dataset or to obtain the dataset itself. This person must be the **Principle Investigator (professor or permanent researcher)** in whose organization the work was conducted as they should be available to be contacted in the long term. This attribution is similar to the assignment of a corresponding author or a senior author for a publication.

You should also ensure that your lab PI is aware of and in agreement with your metadata entry details.

As for additional roles, Metadata Provider is the person or organization that produced or provided metadata content.

It is possible to enter more than one contact person **but the lab PI should always appear first**.

5. Description

Short summary of the purpose and content of the dataset. Entering a dataset description is required. As the description is used for full-text searches, it should

be as descriptive as possible, providing information especially on what, where, and when questions but also on important elements of the study that don't correspond to any of the proposed metadata fields.
Example: *Data were collected every year in summer and fall from 1967 to 1979. Sampling was conducted only in the fall from 1980 to 1988. For each specimen taken, data were recorded on species, date, location, time, sex, and body measurements including total length, length of tailspine, presence/absence of eggs. The purpose of the data was to index the population size of all species present over a long time period. If applicable, insert the citation of the publication (including the publication DOI) related to the dataset, at the end of the Abstract field.*

6. Description

If applicable, the date when the data was produced, as for example for GIS-extracted land use data.

7. Subject

Select the most appropriate option
e.g. *Earth and Environmental Sciences*

8. Keywords

Provide information for as many keywords as needed in the "Term" entry
Leave "Vocabulary" and "Vocabulary URL" empty

9. Related publication

Cite any publication that cites this data.
Citation: Full publication citation
ID Type select DOI.
ID Number DOI number

10. Notes

Enter the variable names contained in the data and associated units
E.g. *pH, DOC (mg/L), TP (ug/L), TN (mg/L), Temperature (°C), zooplankton biomass (µg d.w./L).*

Please describe all variables and attributes appearing in the data, as it will be used for full-text searches.

11. Files

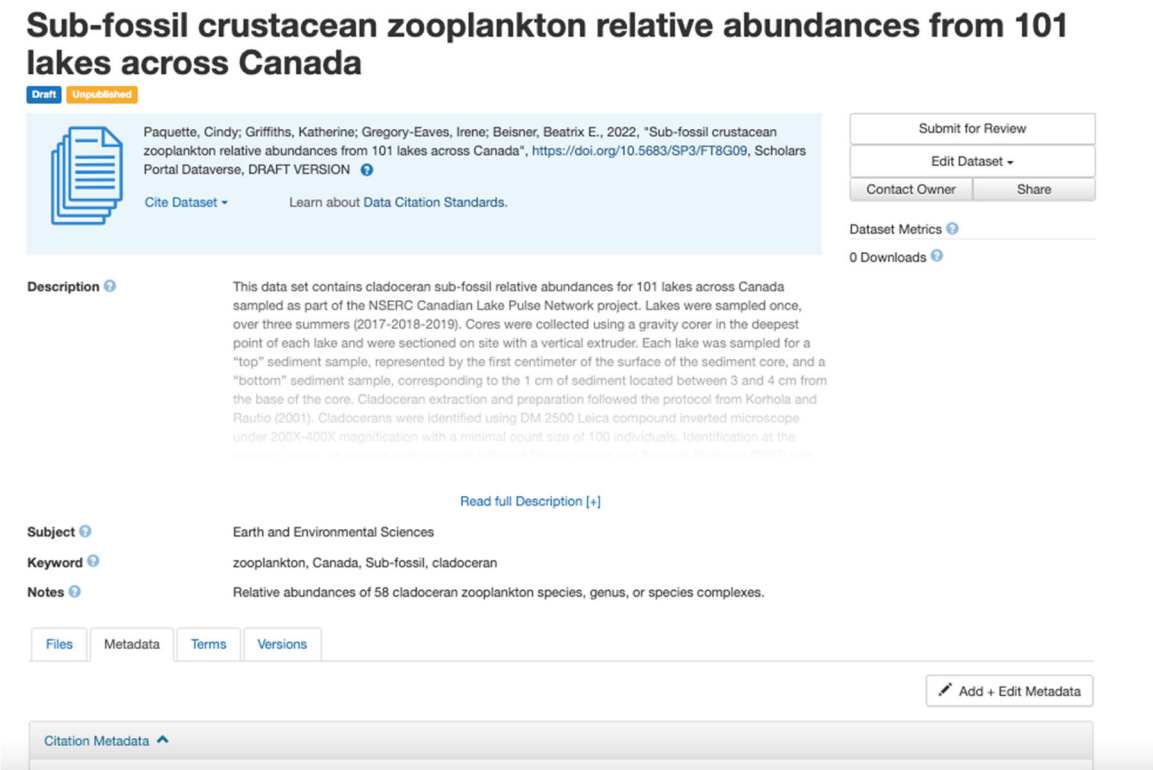
A metadata form is usually accompanied by a dataset. However, GRIL has decided to let their members choose the most appropriate online data repository

and the level of access (including private). Please refer to the GRIL Policy on Data Archiving and Sharing (GPDAS) for more information on data archiving and to access the list of suggested data repositories. Some recommended data repositories include Zenodo, Dryad, Open Science Framework, figshare, Environmental Data Initiative, Pangaea, and KNB.

Step 3: Click on "Save Dataset".
Then click on Edit Dataset to find the metadata entry page.

Step 4: Entering your detailed metadata (2 sections)

On the new metadata page, click on the "Metadata" tab, then click on "Add + Edit Meta data". See screen capture below:



Section 1: Citation Metadata

Alternative URL
If it exists (see optional point 11 above), enter the URL link from the public dataset repository where the data is archived
(e.g. Zenodo, Dryad, etc.)

Grant Information

Add the award number from the funding agency. If your project is not associated with any funding agency number, insert a distinctive name that could easily identify the project funding sources. For students who have received funding from the GRIL Program for Collaborative Projects, the personal identifier related to your collaborative projects should be entered here (ex: GRIL-PCR-19H01).

Time period Covered
Specify the time period covered by the date. Might match or not the date of collection.
e.g. For sediment core data covering the last 150 years
Start 1850 End 2019

Date of collection
Specify the exact date of the start and end of the collection or creation of this dataset. Specify a year only (YYYY) or a year, month, and date (YYYY-MM-DD)
e.g. For sediment cores collected between june 2017 and august 2019:
Start 2017-06 End 2019-08

Kind of data
Type of data collected
e.g. observation data, DNA barcoding, in situ measurements

Leave the other entries empty

Section 2: Geospatial Metadata

Geographic Coverage
Enter Country, state/province/city of the data collection

Geographic Unit
The lowest geographic level covered by the data
e.g. lakes

Geographic Bounding Box (optional)
The latitude and longitude coordinates (in decimals) of the location where the data were collected. At least one lat/long pair is required.

- **If you enter one coordinate pair only**: This indicates a point location.

- **If you enter both coordinate pairs**: This indicates a bounding box. The first coordinate pair is the northwest corner and the second coordinate pair is the southeast corner of the bounding box. Geographic coordinates should be entered in decimal degrees and should belong to the same geodetic system.

You can build a custom bounding box with a tool like Bounding Box Drawing Tool. Enter the location which you want the bounding box to cover or simply use the hand tool in the map box to move to the right region on the map and then use the rectangle tool to draw the geographic limits of your data sampling. The coordinates will be shown below the map box. Northwest coordinates correspond to maximum latitude and minimum longitude, and southeast coordinates to minimum latitude and maximum longitude.

Leave the other entries empty

Step 5: Click on "Submit for review ».

GRIL coordinators will then see your entry and can verify it, make suggestions or accept it. You should also ensure that your lab PI is in agreement with your entry.

Conditions/Conditions de l'ensemble de données

Licence/Conditions d'utilisation des données : La plupart du temps, la licence CC-BY est l'option à privilégier. Vos données sont ouvertes, mais le crédit vous revient (citation obligatoire).

Terms/Dataset Terms

License/Data Use Agreement: Most of the time, the CC-BY license is the preferred option. Your data is open, but you are credited (citation required).