



Preparing Images for EMU Ingestion at NYBG:

A Guide to Adding Required Metadata in Lightroom Classic (LrC)

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Photograph of Alice Eastwood and Eastwoodia
Image Courtesy of the C. V. Starr Virtual Herbarium of The New York Botanical Garden
(<http://sweetgum.nybg.org/science/vh/>).

Getting Started with Lightroom Classic (LrC)

This guide is intended as a “quick start” guide for using Lightroom Classic (LrC) to add metadata to field photos prior to EMu ingestion at NYBG. All field photos (and SEMs/Micrographs) must adhere to the required metadata standards.

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Photograph of lichen taken in the field in Great Smoky Mountains National Park
Image by James Lendemer created as part of NSF Dimensions of Biodiversity Awards #1542629 and #1542639.

Lightroom Classic vs. Lightroom

Adobe offers 2 Lightroom products: Lightroom Classic (LrC) is desktop only; Lightroom (or Lightroom CC, Lightroom Ecosystem) is cloud based.

You must use Lightroom Classic to populate the required metadata for import to EMu.



Viewing and adding metadata

Feature	Lightroom Classic	Lightroom Ecosystem
View EXIF/IPTC metadata	Yes	Yes
Star ratings	Yes	Yes
Flags	Yes	Yes
Color labels	Yes	No
Title, Caption	Yes	Yes
Copyright	Yes	Yes
Edit capture time	Yes	Yes
Add other IPTC metadata	Yes	No
Keywords	Yes	Yes
View GPS	Yes	Yes (desktop only)
Add GPS	Yes	No
Face recognition	Yes	Yes
Write metadata to files	Yes	Yes, only when saving a copy

You need this feature to add required metadata for import into EMu

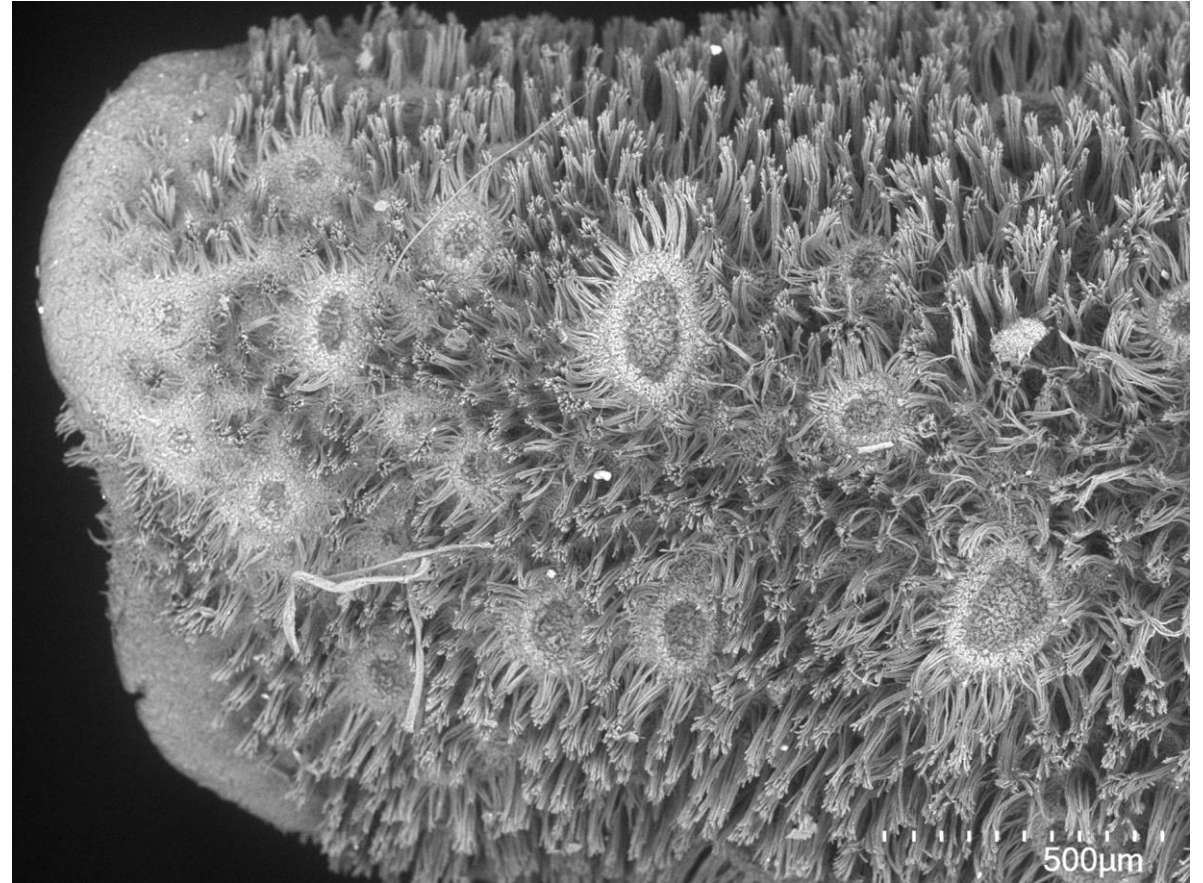
LrC Tutorials for Beginners

If you have never used Lightroom, this 5 minute video will introduce you to the basics of Lightroom and its various modules:

[Get to Know the Layout of Lightroom Classic](#)

In addition to the video above, Adobe offers an excellent collection of videos and guides you may find useful:

<https://helpx.adobe.com/lightroom-classic/tutorials.html>



SEM of *Sticta_Muscavitch_534*

Photograph by the Southern Appalachian Lichens Dimensions Team for NSF Dimensions of Biodiversity Awards #1542629 and #1542639. Courtesy of the C. V. Starr Virtual Herbarium of The New York Botanical Garden (<http://sweetgum.nybg.org/science/vh/>).

NYBG's Field Photo Metadata Template

The Field Photo Metadata template is specifically designed for capturing metadata required and recommended for ingesting field photographs into EMu at NYBG. The template organizes and arranges the relevant metadata fields for efficient data capture, and it hides any fields that are not relevant for field photos. To use the template, you must add the template file to your Lightroom User Directory (instructions on following slides).

To access the file:

NYBG Users: The file can be accessed on the Pub drive:

"X:\Pub\Herbarium\Digital_asset_management\Field_photos\Lightroom_templates\Field_Photo_Metadata_Template.lrtemplate"

All other users: Request file from Herbarium Digital Asset Manager
(lfeder@nybg.org)

Adding the Field Photo Metadata Template to LrC

Step 1: Open the Lightroom User Directory:

COPY/PASTE the following into your Microsoft Windows Explorer address bar, making sure to replace “UserName” with your username. If you are accessing lightroom from an NYBG computer this will be your NYBG username.

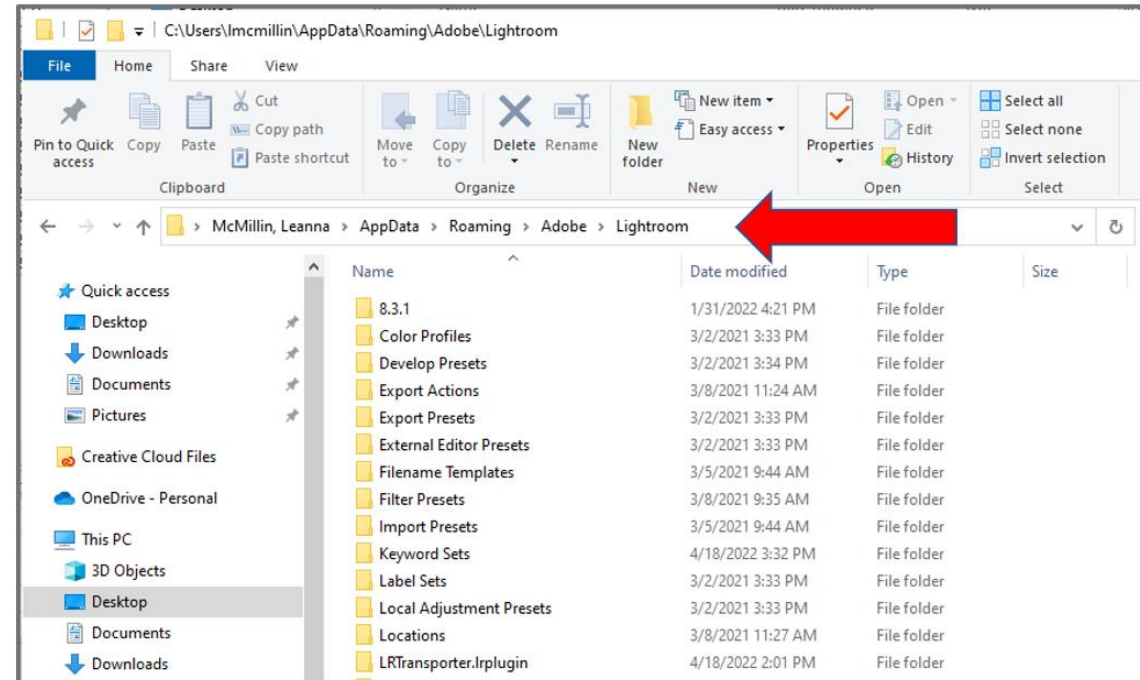
“C:\Users\UserName\AppData\Roaming\Adobe\Lightroom”

Example:

C:\Users\Imcmillin\AppData\Roaming\Adobe\Lightroom

For Mac, COPY/PASTE the following:

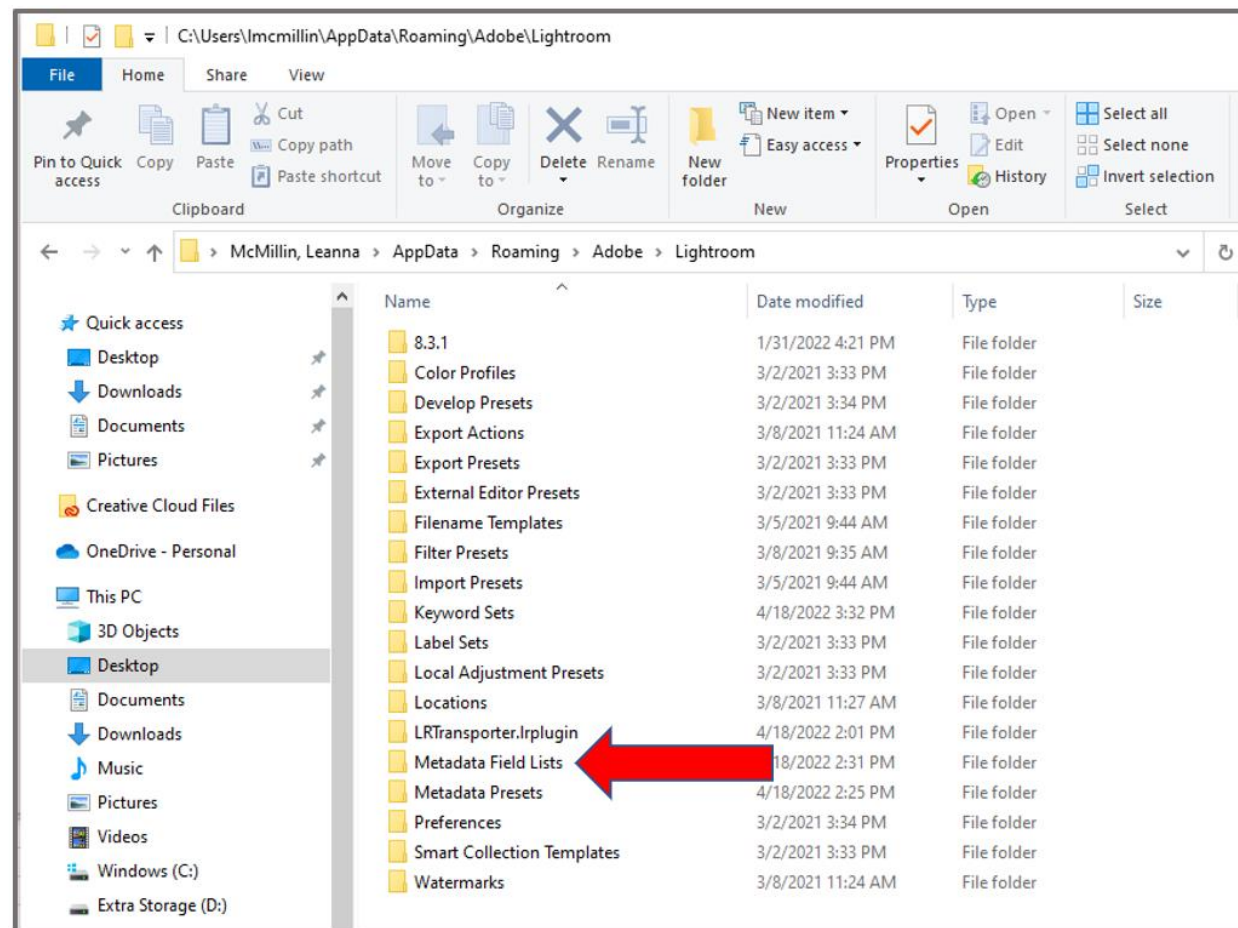
Mac: ~/Library/Application Support/Adobe/Lightroom



Adding the Field Photo Metadata Template to LrC

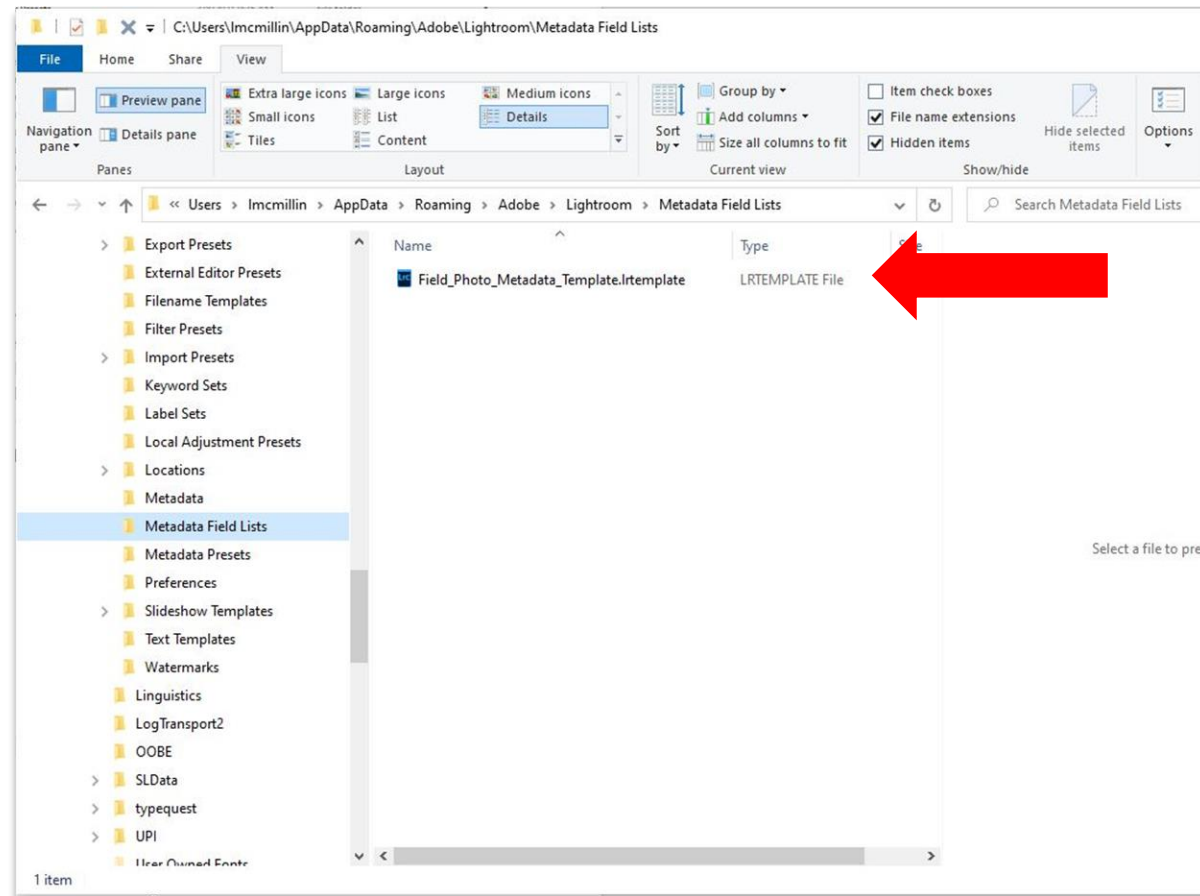
Step 2: Create a new folder and label it “Metadata Field Lists”

****It is critical that you label the folder with this exact name.****



Adding the Field Photo Metadata Template to LrC

Step 3: Insert the file: Field_Photo_Metadata_Template.lrtemplate
COPY/PASTE the file into your new “Metadata Field Lists” folder.

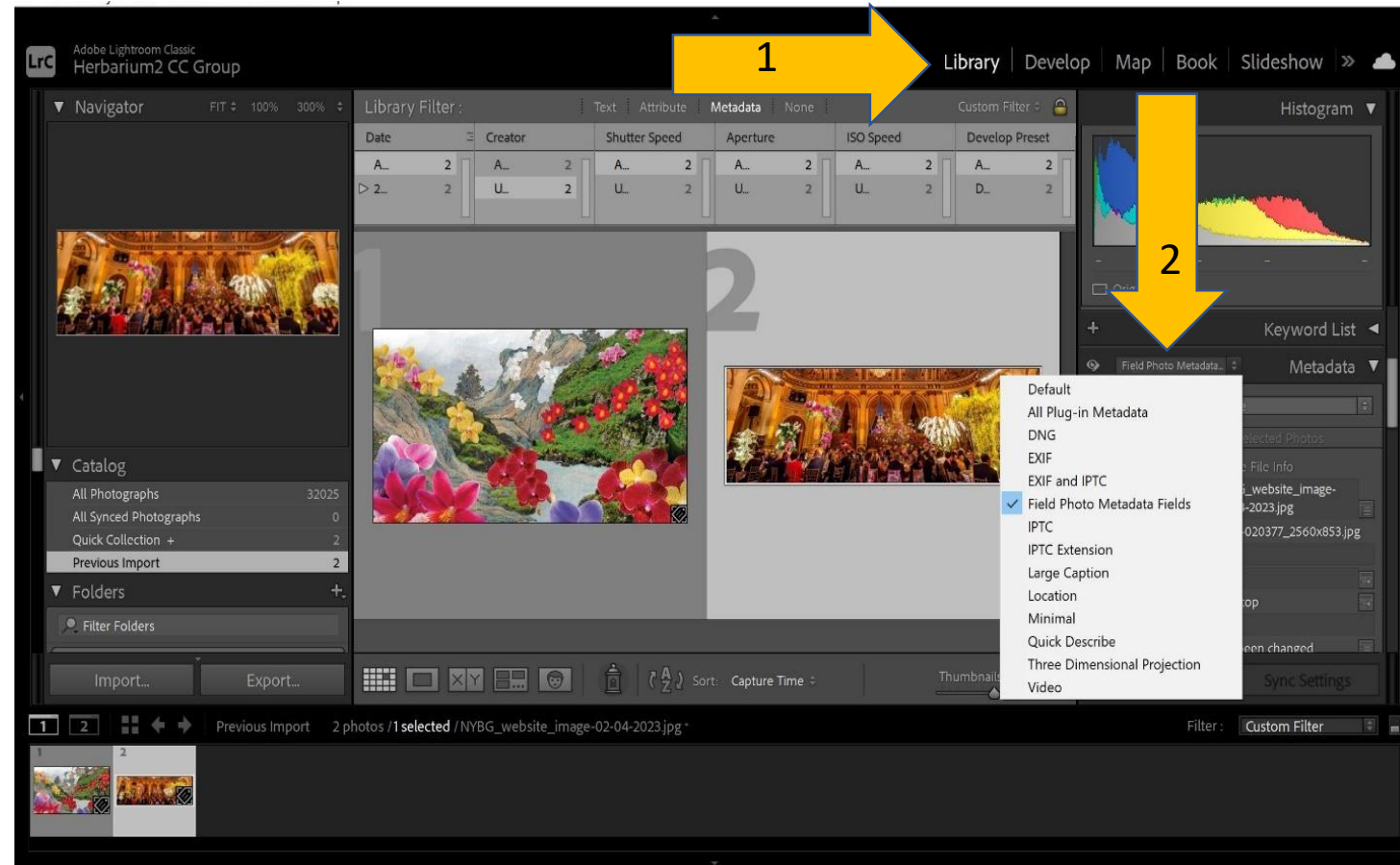


Adding the Field Photo Metadata Template to LrC

Step 4: Open (or restart, if already open) Lightroom, and select template.

In the Library module (1) navigate to the drop-down list at the top of the Metadata panel (2).

Select “Field Photo Metadata Fields” from the drop-down list.

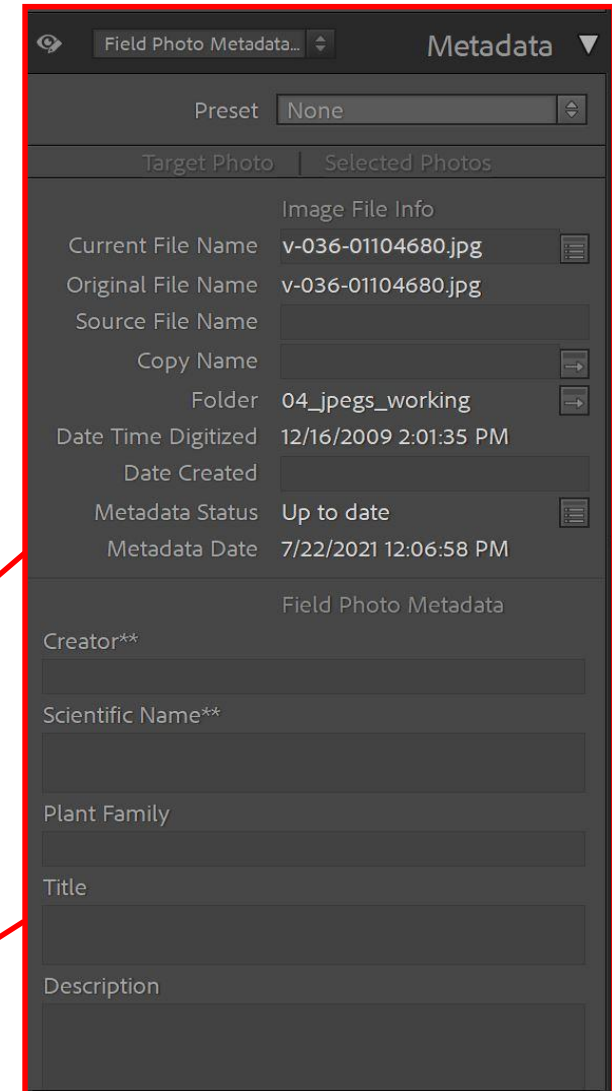
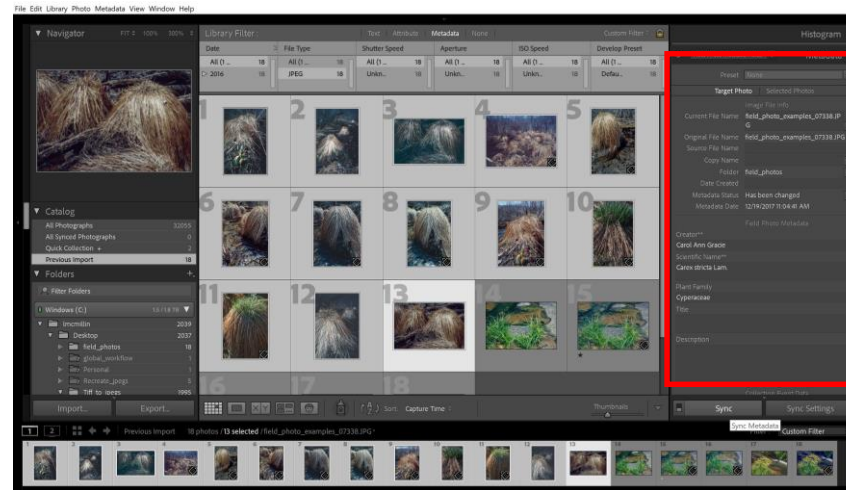


Metadata Fields Explained

The following slides contain screenshots of all metadata fields that are required (**) and recommended for ingesting field photos into EMu.

Images without metadata populated in the required fields will not be ingested into EMu.

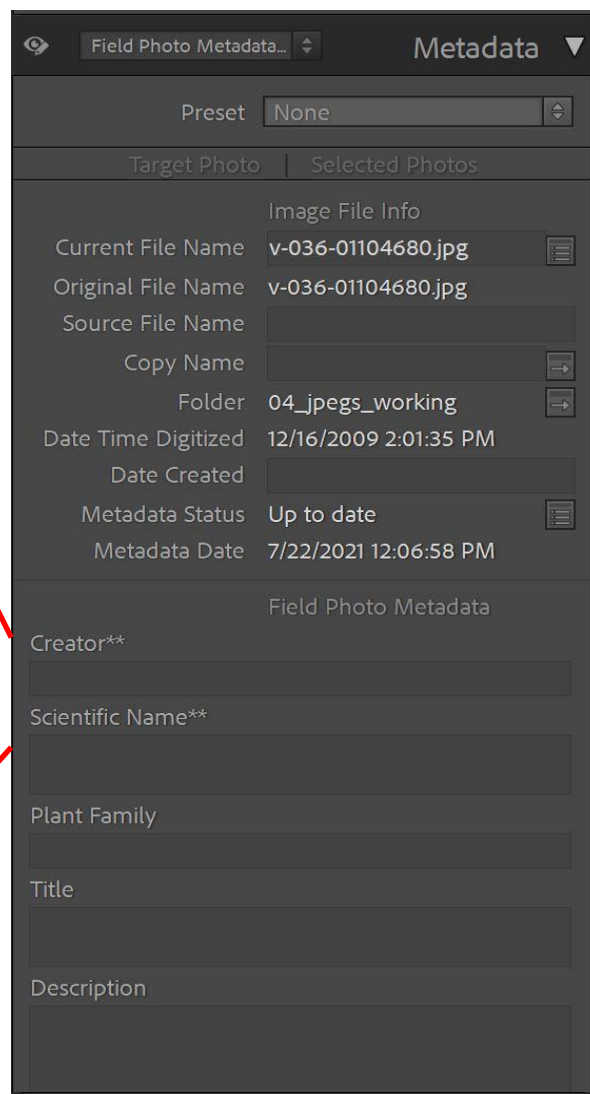
It is strongly encouraged that you populate metadata in the recommended fields, whenever possible. This will greatly improve the findability of your images on the Virtual Herbarium and within EMu.



Metadata Fields Explained

REQUIRED**

Creator**	Full name of person/organization responsible for creating the media resource (i.e. the photographer).
Scientific Name**	Full scientific name (genus species author) of species photographed



Recommended

Plant Family	Family name of species photographed.
Title	Concise title, name, or brief descriptive label of the individual resource. Do not recommend using Scientific Name, as this may change over time. Example: Fabián Michelangeli 1587
Description	(= Caption) An account or description of the content of the resource, written as free-form text. Ideally will include the Who, What, Where, When, Why of the resource.

Metadata Fields Explained

REQUIRED IF: associated with a NY voucher

Collector Name	Full name of the primary collector who collected the specimen in the photograph
Collector Number	Number assigned to the collection by the collector

The screenshot shows a dark-themed form titled "Collection Event Data". The fields are arranged vertically and include: NY Barcode, Collector Name, Collector Number, Country / Region, State, City, Precise Locality, GPS, Elevation, and Subject Part. There are small icons (a right arrow and a refresh symbol) to the right of the GPS and Elevation fields. Two orange lines from the text on the left point to the "Collector Name" and "Collector Number" fields in the form.

Recommended

NY Barcode	NY barcode number, if known
Country	Country in which the plant was growing when photographed.
State/Prov	State or province in which the plant was growing when photographed.
City	City in which the plant was growing when photographed
Precise Locality	Textual locality description (excluding country, state/prov, and city) where plant was growing when photographed
GPS	Latitude and Longitude coordinates where plant was growing when photographed.
Elevation	Elevation where plant was growing when photographed.
Subject Part	Portion of the organism or environment shown or particularly well illustrated. Not a formally controlled vocabulary. Please see "Subject Part Keywords" for a list of current terms in EMu. You may add additional keywords if needed.

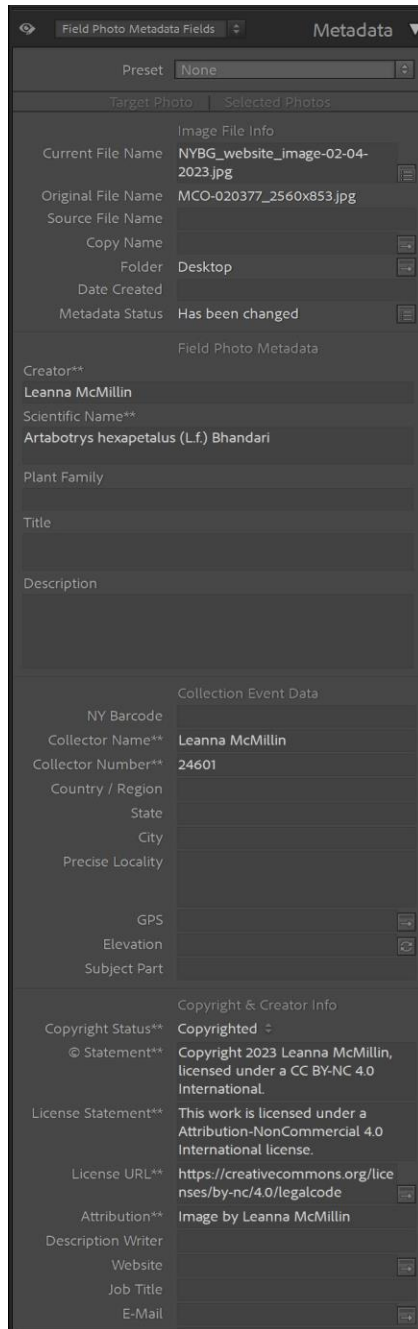
Metadata Fields Explained

REQUIRED**

Copyright Status**	You must select "Copyrighted" or "Public Domain." Images for which the copyright status is "Unknown" will not be ingested into EMu.
© Statement (Copyright Statement) **	Copyright statements must follow this format: "Copyright Year Name" If desired, you may add the phrase "All rights reserved."
License Statement	REQUIRED IF: using a Creative Commons license.
License URL	REQUIRED IF: using a Creative Commons license.
Attribution	REQUIRED IF: using a Creative Commons license. This tells users how an image should be attributed.

Recommended/Optional

Description Writer	Name of the person responsible for writing the image description and metadata (recommended)
Website	Website for the person that created the image
Job Title	Job title for the person listed in the creator field
E-mail	E-mail address for the person that created the image
Country/Region	Country for the person that created the image
State/Province	State for the person that created the image
City	City for the person that created the image
Address	Address for the person that created the image

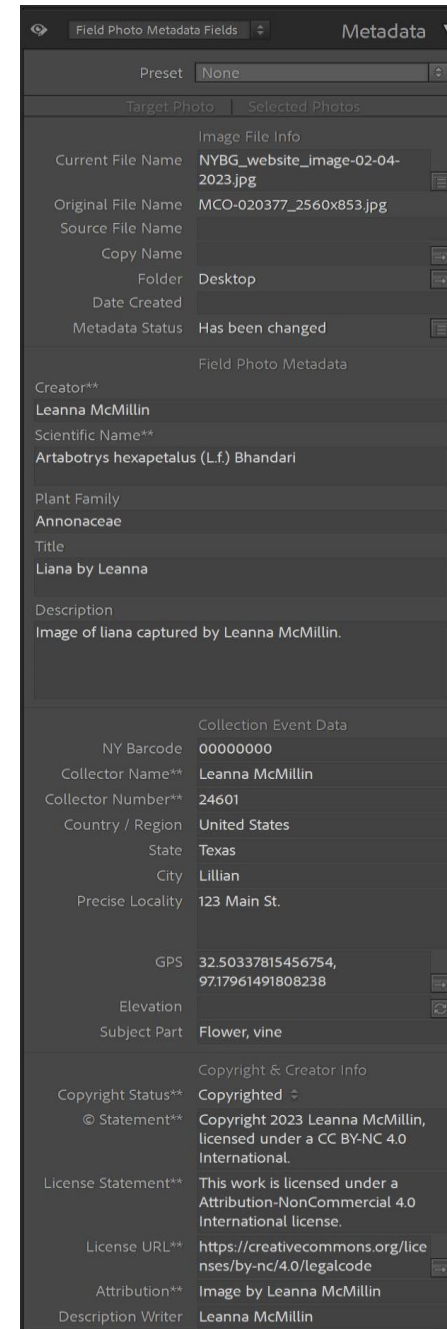


Minimal metadata example

Creator, Scientific Name,

Collector, Collector Number,

Copyright status, Copyright Statement
(License statement, License URL and
Attribution statement required for
Creative Commons License)



Expanded metadata example

Creator, Scientific Name, Plant Family,
Title, Description

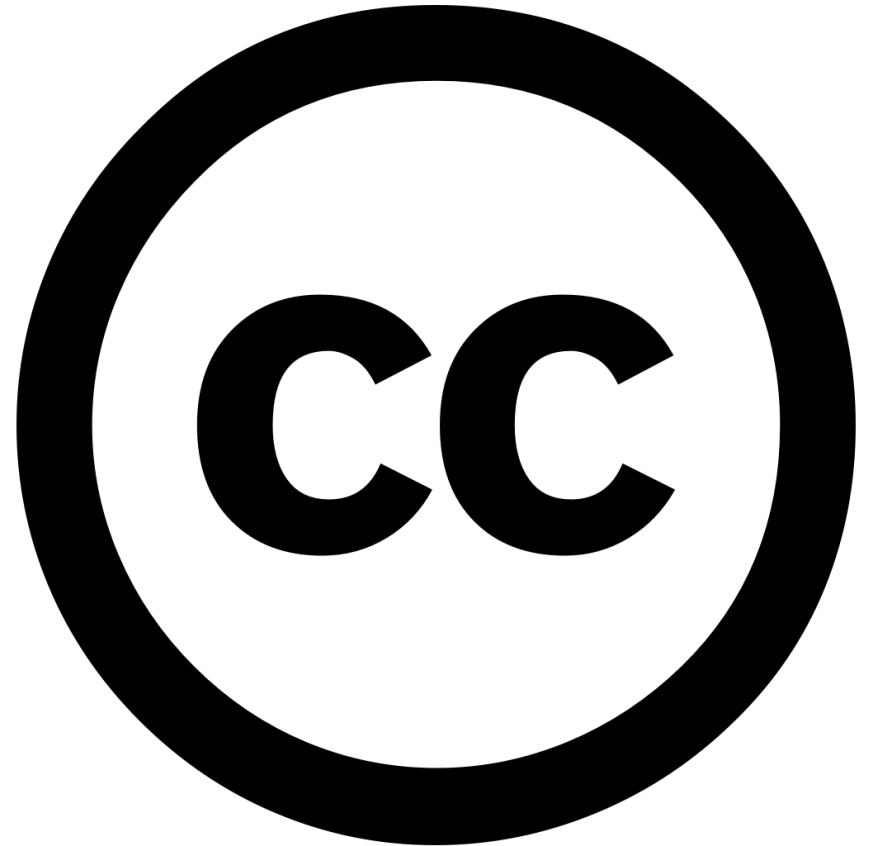
NY Barcode, Collector Name,
Collector Number, Locality information,
Subject part keywords

Copyright/License metadata +
Description Writer

A note about Copyright and Creative Commons

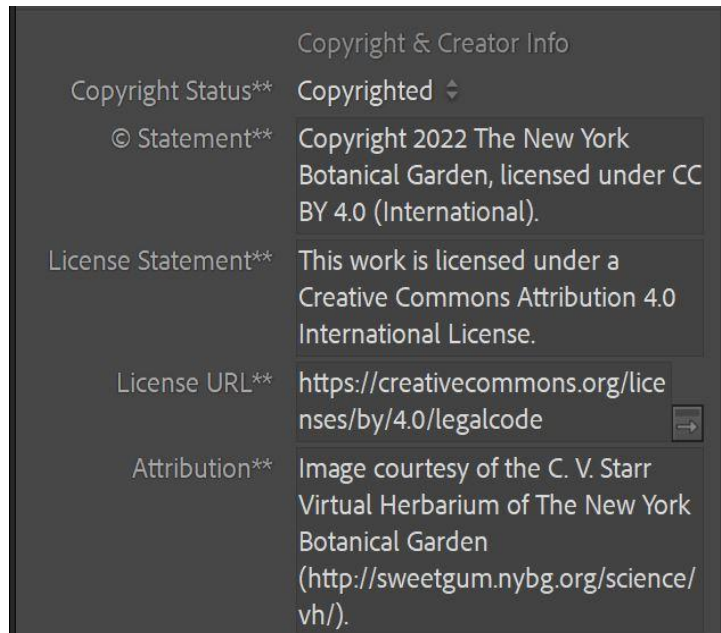
The images you provide for ingestion into EMu will be featured on the [Virtual Herbarium](#) and available via the [Image Search Tool](#).

*It is strongly encouraged that you publish your images using a **Creative Commons (CC) license**.* These licenses are widely recognized and provide creators a standardized way to share their work while ensuring proper attribution. There are many CC licenses to choose from; the Creative Commons website features [a quick and easy tool](#) for determining which license is best for you.



A note about Copyright and Creative Commons

- Example: NYBG specimen images are published under a CC BY Attribution 4.0 International license, allowing users to freely use the image however they please, as long as they attribute the image to NYBG.
- Using an NYBG Specimen image as an example, the metadata in the “Copyright & Creator Info” panel in Lightroom would look like this:



Copyright status = Copyrighted

Copyright statement follows the “Copyright Year Name” format, followed by the phrase “licensed under [INSERT CC SHORTHAND NAME].”

List of shorthand names along with license descriptions.

This section should read “This work is licensed under a Creative Commons [INSERT LICENSE NAME] License”

The URL describing the legal code of the license, found on the CC website for each license.

The attribution statement stipulates how users should attribute the image.

A note about Copyright and Creative Commons

- You may choose to limit the use of your images, i.e. by allowing adaptations but not commercial use. All license options are clearly defined and explained on the [Creative Commons website](#), including a list of [frequently asked questions](#).
- Please reach out to the Digital Asset Manager (lfeder@nybg.org) if you have additional questions about these licenses, the proper format for your metadata, or how your images will be used on the Virtual Herbarium.



Field photograph of K. S. Gonçalves 439.

Copyright 2020 Douglas C. Daly, licensed under CC BY-NC-ND 4.0 (International).

Importing photos to LrC

The screenshot shows the Adobe Lightroom Classic interface in the Library module. A yellow arrow points from a text box to the 'Library' tab in the top navigation bar. Another yellow arrow points from a text box to the 'Import...' button in the bottom-left corner of the grid. The central grid area displays the message 'No photos match the filter.' The left sidebar shows the 'Catalog' and 'Folders' panels, with the 'field_photos' folder selected. The right sidebar shows the 'Histogram' and 'Metadata' panels.

You must be in the “Library” module to import photos.

Select the import button on the bottom left of the Library Module.

Date	File Type	Shutter Speed	Aperture	ISO Speed	Develop Preset
All (0... 0	All (1... 0	All (0... 0	All (0... 0	All (0... 0	All (0... 0
	JPEG 0				

Windows (C:) 1.5 / 1.8 TB

- Imcmillin
 - Desktop
 - field_photos 18
 - global_w 1

Import... Export...

Sort: Capture Time

Thumbnails

Sync Sync Settings

Importing photos to LrC

The screenshot shows the Adobe Lightroom Import dialog box. The interface is dark-themed. At the top, there are buttons for "Copy as DNG", "Copy", "Move", and "Add". Below these, it says "Add photos to catalog without moving them". On the right, there's a "To" dropdown set to "My Catalog" and a folder icon.

The left sidebar shows a "Source" panel with a tree view of the file system. The "Desktop" folder is expanded, showing subfolders: "field_photos", "lightroom_SS", "MM_Imports", and "Tiff_to_jpegs". A yellow arrow points from a text box to the "field_photos" folder.

The main area is currently empty, with the text "Please select a source" visible. A yellow arrow points from a text box to the "field_photos" folder.

The right sidebar shows the "File Handling" section with options like "Build Previews" (Minimal), "Build Smart Previews" (unchecked), "Don't Import Suspected Duplicates" (checked), "Make a Second Copy To:" (C:\Users\lmcmillin\Pictur...\Download Backups), and "Add to Collection" (unchecked). Below that is the "Apply During Import" section with "Develop Settings" (None) and "Metadata" (None). A dropdown menu is open for "Metadata", showing options: "None" (checked), "Herbarium Specimen", "New...", and "Edit Presets...". A yellow arrow points from a text box to the "New..." option.

At the bottom, there are buttons for "Check All" and "Uncheck All", a "Sort" dropdown set to "Off", and a "Thumbnails" section.

Select the folder with the images you want to import

**You may find it useful to import your photos using a metadata preset. This allows you to populate select metadata to all images upon import. For instructions on how to create a metadata preset, see "[Applying metadata presets](#)" in this guide. **

Importing photos to LrC

The screenshot shows the Adobe Lightroom interface during the import process. The 'FROM' source is 'Windows (C:)' and the 'TO' destination is 'My Catalog'. The 'Add' button is selected, and the option 'Add photos to catalog without moving them' is chosen. A 'Create Collection' dialog box is open in the center, with the name 'Lightroom Screen Shots' entered. A yellow arrow points from the 'Add to Collection' checkbox in the right-hand 'Apply During Import' panel to the 'Create Collection' dialog. The 'Apply During Import' panel also shows 'Develop Settings' set to 'None' and 'Metadata' set to 'Field Photo Batch 1'. The bottom of the screen shows '18 photos / 7 MB' and 'Import Preset: None'.

FROM Windows (C:) → Add photos to catalog without moving them → TO My Catalog

Source: Windows (C:) → Users \ Imcmillin \ Desktop \ lightroom_SS +

File Handling

- Build Previews: Minimal
- Build Smart Previews:
- Don't Import Suspected Duplicates:
- Make a Second Copy To: C: \ Users \ Imcmillin \ Pictur... \ Download Backups
- Add to Collection: +
- Quick Collection

Apply During Import

- Develop Settings: None
- Metadata: Field Photo Batch 1
- Keywords

Create Collection

Name: Lightroom Screen Shots

Location

- Inside a Collection Set

Options

- Set as target collection

Create Cancel

18 photos / 7 MB

Import Preset: None

Done Import Cancel

You may find it useful to organize your imports into collections. To do this, select "Add to Collection" prior to import

Importing photos to LrC

FROM Windows (C:) → Copy as DNG Copy Move Add TO My Catalog

Users \ Imcmillin \ Desktop \ field_photos +

Source

Files Include Subfolders

Windows (C:)

Users

Imcmillin

Desktop

field_photos

lightroom_SS

MM_Imports

Tiff_to_jpegs

Herb EMU (Q:)

HerbScan (R:)

Herb DNG Archive (T:)

Herb Archive (U:)

Herb DNG Archive2 (V:)

Science Dept Stor (X:)

NYBG Shared Drive (Y:)

Science User Stor (Z:)

New Photos 18 photos

field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa...

field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa... field_photo_exa...

To import all images, select "Check All".

To import images individually, select "Uncheck All" and manually select the images you want to import by clicking on the check box in the top left corner of each thumbnail.

When you are done selecting the images, press "Import"

File Handling

Build Previews Minimal

Build Smart Previews

Don't Import Suspected Duplicates

Make a Second Copy To : C:\Users\Imcmillin\Pictur...\Download Backups

Add to Collection

Apply During Import

Develop Settings None

Metadata Field Photo Batch 1

Keywords

Check All Uncheck All Sort: Off Thumbnails

18 photos / 85 MB Import Preset: None Done Import Cancel

Importing photos to LrC

The screenshot displays the Adobe Lightroom Classic interface. On the left, the 'Navigator' panel shows a large preview of a photo of a bird's nest. Below it, the 'Catalog' panel lists various collections, with 'Previous Import' highlighted and containing 18 photos. The 'Folders' panel shows a tree view of the file system, with 'field_photos' under the 'Desktop' folder containing 18 photos. The main grid area shows a grid of 18 photo thumbnails, with the first one selected. A white text box with a yellow arrow pointing to the 'Previous Import' collection in the Catalog panel contains the text: "Your imported photos will automatically be added to the Catalog 'Previous Import'". The right side of the interface features the 'Histogram', 'Quick Develop', and 'Keywording' panels. The 'Keywording' panel shows a list of keyword suggestions and a 'Recent Keywords' set. The bottom status bar indicates '18 photos / 1 selected / field_photo_examples_07326.JPG' and 'Filter: Custom Filter'.

Library Filter: Text Attribute Metadata None Custom Filter

Date	File Type	Shutter Speed	Aperture	ISO Speed	Develop Preset
All (1 ... 18	All (1 ... 18	All (1 ... 18	All (1 ... 18	All (1 ... 18	All (1 ... 18
2016 18	JPEG 18	Unkn... 18	Unkn... 18	Unkn... 18	Defau... 18

▼ Navigator FIT 100% 300%

▼ Catalog

- All Photographs 32055
- All Synced Photographs 0
- Quick Collection + 2
- Previous Import 18**

▼ Folders +

Filter Folders

Windows (C:) 1.5 / 1.8 TB

- Imcmillin 2039
 - Desktop 2037
 - field_photos 18
 - global_workflow 1
 - Personal 1
 - Recreate_jpegs 5
 - Tiff to idegs 1995

Import... Export...

Sort: Capture Time

Thumbnail

Sync Sync Settings

18 photos / 1 selected / field_photo_examples_07326.JPG Filter: Custom Filter

Your imported photos will automatically be added to the Catalog "Previous Import"

Importing photos to LrC

The screenshot displays the Adobe Lightroom Classic interface. The top navigation bar includes 'Library', 'Develop', 'Map', 'Book', 'Slideshow', 'Print', and 'Web'. The left sidebar contains the 'Navigator' panel, 'Catalog', 'Folders', and 'Collections' panel. The 'Collections' panel shows a list of collections, with 'Lightroom Screen Shots' (18 photos) selected. A yellow arrow points from a text box to this collection. The main grid shows a grid of photo thumbnails, with the first one selected. The right sidebar contains the 'Histogram', 'Quick Develop', 'Keywording', 'Keyword List', 'Metadata', and 'Sync' panels. The 'Metadata' panel shows file information for 'import-01.JPG'.

Date	File Type	Shutter Speed	Aperture	ISO Speed	Develop Preset
All (1 ... 18	All (1 ... 18	All (1 ... 18	All (1 ... 18	All (1 ... 18	All (1 ... 18
2023 18	JPEG 18	Unkn... 18	Unkn... 18	Unkn... 18	Defau... 18

Collection : Lightroom Screen Shots 18 photos / 1 selected / import-01.JPG

Filter : Custom Filter

If you imported your photos to a collection, your images will also appear in the "Collections" panel. Collections are useful for organizing multiple batches of images.

Applying Metadata presets

The screenshot shows the Adobe Lightroom Import dialog. On the left is the 'Source' panel with a file tree. The top bar contains 'Copy as DNG', 'Copy', 'Move', and 'Add' buttons. The right panel is titled 'Apply During Import' and includes sections for 'File Handling' and 'Metadata'. The 'Metadata' dropdown menu is open, showing options: 'None' (checked), 'Herbarium Specimen', 'New...', and 'Edit Presets...'. A yellow arrow points from the 'New...' option to the text box. The text box contains the instruction: 'To create a custom metadata preset, select "New" in the metadata drop down menu within the "Apply During Import" panel.'

Select a source →

Copy as DNG Copy Move Add →

Add photos to catalog without moving them

TO My Catalog

Source

Files

- Windows (C:)
- Users
 - lmcmillin
 - Desktop
 - field_photos
 - lightroom_SS
 - MM_Imports
 - Tiff_to_jpegs
- Herb EMU (Q:)
- HerbScan (R:)
- Herb DNG Archive (T:)
- Herb Archive (U:)
- Herb DNG Archive2 (V:)
- Science Dept Stor (X:)
- NYBG Shared Drive (Y:)
- Science User Stor (Z:)

Please select

File Handling

- Build Previews Minimal
- Build Smart Previews
- Don't Import Suspected Duplicates
- Make a Second Copy To :
C: \ Users \ lmcmillin \ Pictur... \ Download Backups
- Add to Collection

Apply During Import

Develop Settings None

Metadata None

- None
- Herbarium Specimen
- New...
- Edit Presets...

Keywords

Check All Uncheck All

Sort: Off Thumbnails

Applying Metadata presets

Select a source → Copy as DNG Copy Move Add TO My Catalog

Source +

HerbScan (R:) Herb DNG Archive (T:) Herb Archive (U:) Herb DNG Archive2 (V:) Science Dept Stor (X:) NYBG Shared Drive (Y:) Science User Stor (Z:)

File Handling Build Previews Minimal

New Metadata Preset

Preset Name:

Preset: Custom

Basic Info

Camera Info

IPTC Content

Headline

IPTC Subject ...

Description W...

Category

Other Categor...

IPTC Copyright

Copyright

Copyright Status

Rights Usage ...

Copyright Info...

IPTC Creator

Creator

Creator Address

Creator City

Creator State ...

Creator Postal...

Creator Country

Creator Phone

Check All Check None Check Filled Create Cancel

Check All Uncheck All Sort: Off Thumbnails

You can create multiple custom presets with different names

The data you enter will be applied to all images upon import when the preset is selected. You must tell lightroom which fields you want populated by checking the box next to the metadata field.

Applying Metadata presets

Note: The fields labeled “Rights Usage” and “Copyright Info” will populate data in the “License Statement” and “License URL” fields, respectively. See [“Copyright & Creative Commons”](#) in this guide for more information on copyright.

New Metadata Preset

Preset Name:

Preset: Custom

Basic Info

Camera Info

IPTC Content

Headline

IPTC Subject ...

Description W...

Category

Other Categor...

IPTC Copyright

Copyright

Copyright Status

Rights Usage ...

Copyright Info...

IPTC Creator

Creator

Creator Address

Creator City

Creator State ...

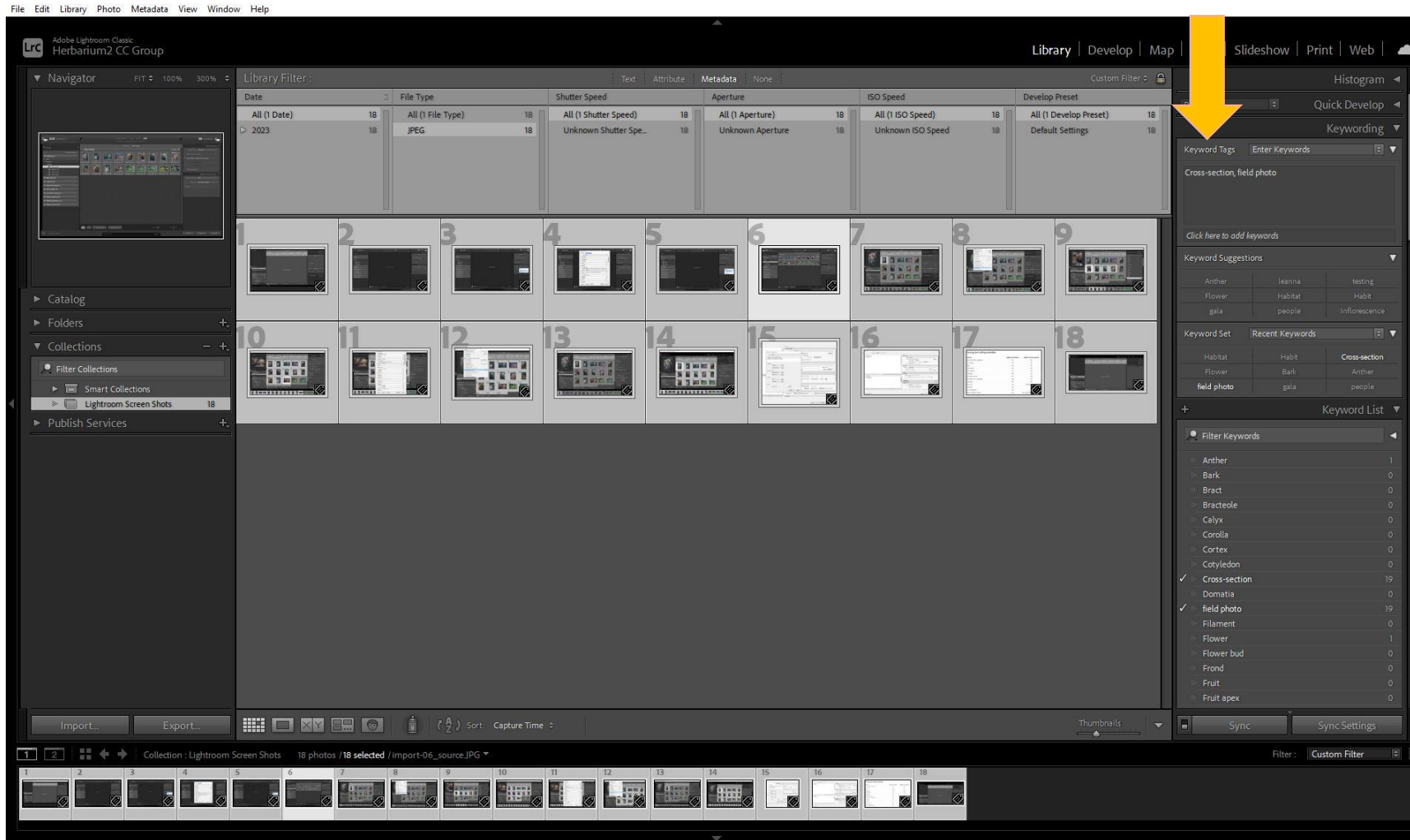
Creator Postal...

Creator Country

Creator Phone

Once you are done, press “Create”.

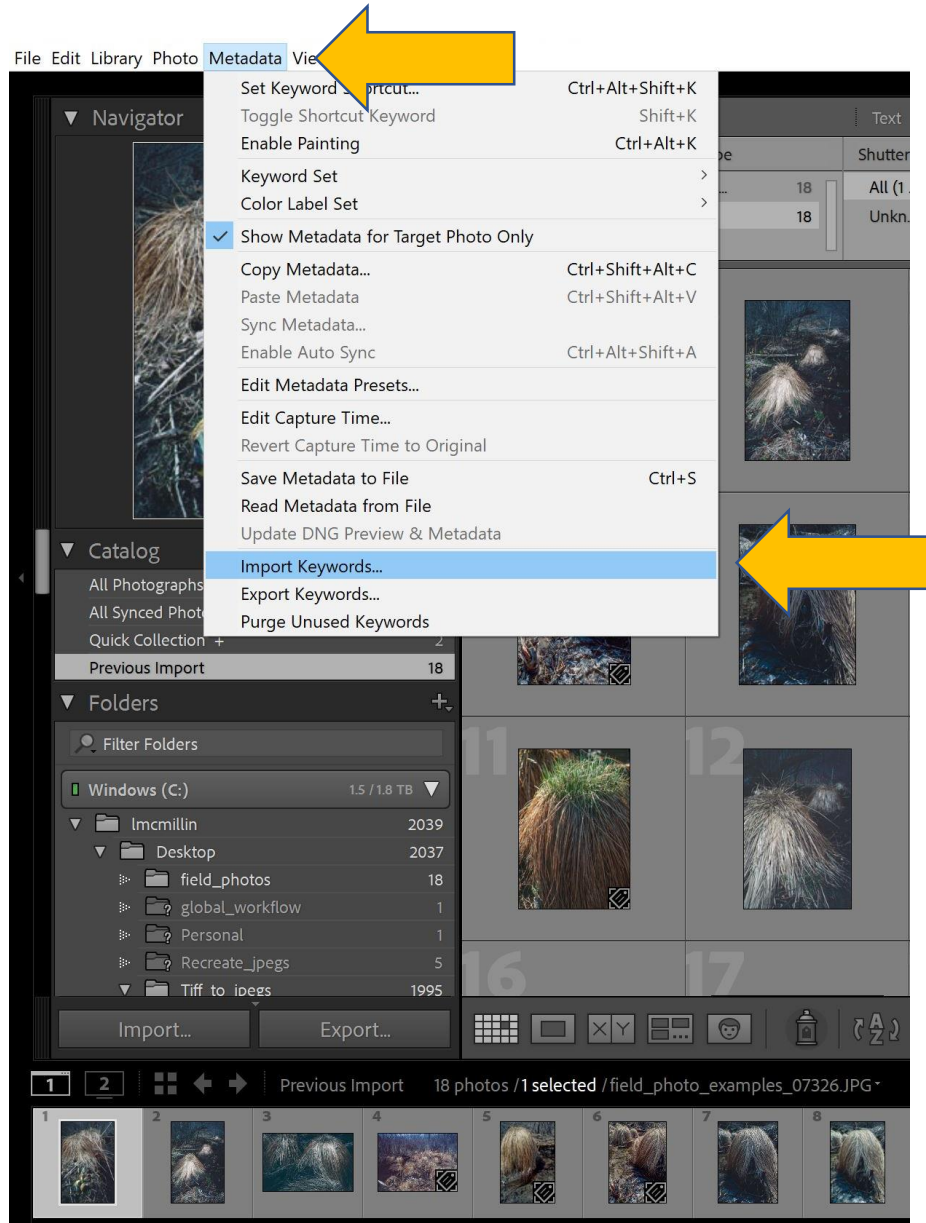
Adding Preselected EMu Keywords to LrC



Keywords are useful for organizing your images in Lightroom and improving the findability of your images in EMu and on the VH.

Multimedia Keywords are not a formally controlled vocabulary. You may choose to insert a list of common plant-related keywords already in use in EMu, or use your own keywords.

Adding Preselected EMu Keywords to LrC



To import a list of helpful keywords already in use in EMu, select “Import Keywords” under the Metadata menu at the top left of the Lightroom program.

Import the file: “Field_photo_keywords.txt”

NYBG users can locate the file on the Pub drive, all other users contact the Digital Asset Manager (lfeder@nybg.org)

"X:\Pub\Herbarium\Digital_asset_management\Field_photos\LIGHTROOM\Field_photo_keywords.txt"

Keywords are very useful for end users searching for your images in EMu or via the [Image Search Tool](#)!

Adding Preselected EMu Keywords to LrC

File Edit Library Photo Metadata View Window Help

The keywords you imported will appear here. You may also choose to add your own keywords.

To apply the same keyword to multiple images, select as many images as you would like and click the box next to the keyword.

Keyword	Count
Anther	1
Bark	0
Bract	0
Bracteole	0
Calyx	0
Corolla	0
Cortex	0
Cotyledon	0
Cross-section	1
Domatia	0
field photo	1
Filament	0
Flower	1
Flower bud	0
Fron	0
Fruit	0
Fruit apex	0
Fruit base	0
gala	1
Gland	0
Habit	7
Habitat	5
HAC Herbarium	1
Huber 5788	1
Hypanthium	0
image 2	1
image 3	1

Syncing metadata across images

File Edit Library Photo Metadata View Window Help

The screenshot displays the Adobe Bridge interface with a library of 18 photos. A white text box is overlaid on the grid, providing instructions on how to sync metadata. A yellow arrow points from the text box to the 'Sync' button in the right-hand metadata panel. The metadata panel shows fields for 'Image File Info' and 'Field Photo Metadata', with the 'Sync' button highlighted.

You may wish to sync metadata across a selected group of images. For example, if you have multiple images from the same collection event, you may wish to sync the taxonomic and collection information.

To do this, enter the metadata in the appropriate fields, select the images you wish to sync and press "Sync"

Sync

Syncing metadata across images

Similar to the metadata template you created during your import, you will enter metadata into the relevant fields and check the box next to the fields you want to sync across the selected images.

NOTE: The fields “Headline” and “Other Categories” will populate data in the “Scientific Name” and “Plant Family” fields, respectively.

The screenshot shows the 'Synchronize Metadata' dialog box with the following fields and checked boxes:

- IPTC Content**
 - Headline: Carex stricta Lam.
 - IPTC Subject ...
 - Description W...
 - Category
 - Other Categor...: Cyperaceae
- IPTC Copyright**
 - Copyright: Carol Ann Gracie. All rights reserved.
 - Copyright Status: Copyrighted
 - Rights Usage ...
 - Copyright Info...
- IPTC Creator**
 - Creator: Carol Ann Gracie
 - Creator Address
 - Creator City
 - Creator State ...
 - Creator Postal...
 - Creator Country
 - Creator Phone
 - Creator E-Mail
 - Creator Website
 - Creator Job Ti...: Type to add, leave blank to clear
- IPTC Image**
 - Date Created
 - Intellectual G...
 - IPTC Scene C...
 - Sublocation: Halle Ravine
 - City: Pound Ridge
 - State / Province: New York
 - Country / Reg...: United States of America
 - ISO Country C...

Buttons at the bottom: Check All, Check None, Check Filled, Synchronize, Cancel.

In the background, the 'Metadata' panel shows the following information:

- Field Photo Metadata Fields
- Target Photo: Selected Photos
- Image File Info
 - Current File Name: field_photo_examples_07338.JPG
 - Original File Name: field_photo_examples_07338.JPG
 - Source File Name
 - Copy Name
 - Folder: field_photos
 - Date Created
 - Metadata Status: Has been changed
 - Metadata Date: 12/19/2017 11:04:41 AM
- Field Photo Metadata
 - Creator**: Carol Ann Gracie
 - Scientific Name**: Carex stricta Lam.
 - Plant Family: Cyperaceae
 - Title
 - Description
- Collection Event Data
- Buttons: Sync, Sync Settings
- Filter: Custom Filter

More Tips on Using the Library Module

Lightroom Classic is a powerful tool for organizing your images.

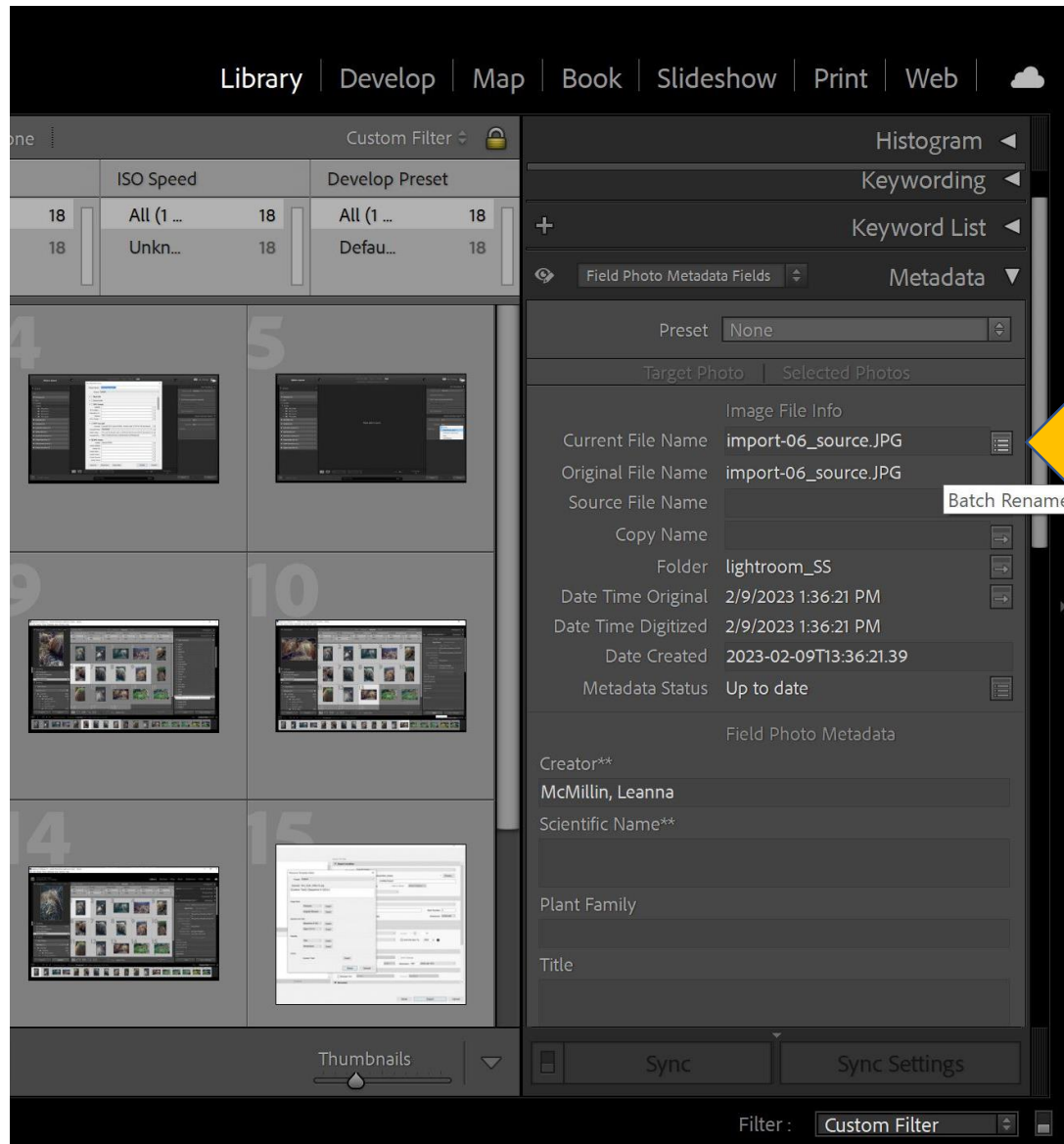
To learn about the many features of the Library module, as well as the different viewing options, see Adobe's tutorial:

[Library module basic workflow](#)



Original watercolor of *Nopalea cochenillifera* by Frances W. Horne for Flora Borinqueña

Batch Rename Files



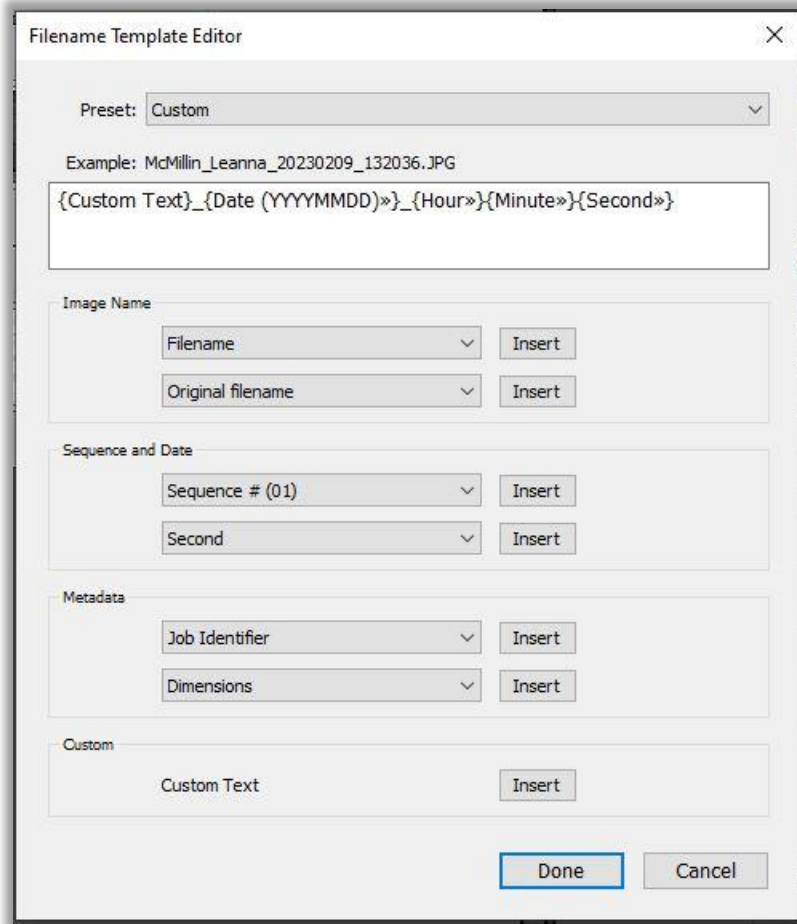
Lightroom allows for quick and easy batch renaming of your files. To customize a file naming template, click on the box next to the “Current File Name” field.

Image file names must be unique for EMu import.

See “NYBG_VH_file_naming_standards”, located on the Pub drive, for detailed information on file naming requirements in EMu. Non-NYBG users contact the Digital Asset Manager (lfeder@nybg.org).

X:\Pub\Herbarium\Digital_asset_management\Field_photos\LIGHTROOM\NYBG_VH_file_naming_metadata_standards_20190324.pdf

Batch Rename Files



Filename Template Editor

Preset: Custom

Example: McMillin_Leanna_20230209_132036.JPG

{Custom Text}_{Date (YYYYMMDD)»}_{Hour»}{Minute»}{Second»}

Image Name

Filename

Original filename

Sequence and Date

Sequence # (01)

Second

Metadata

Job Identifier

Dimensions

Custom

Custom Text

Done Cancel

You can use the Filename Template Editor to create file names from embedded metadata or custom text.

This is an example of a template that will likely result in unique names and could be applied to large batches of images:

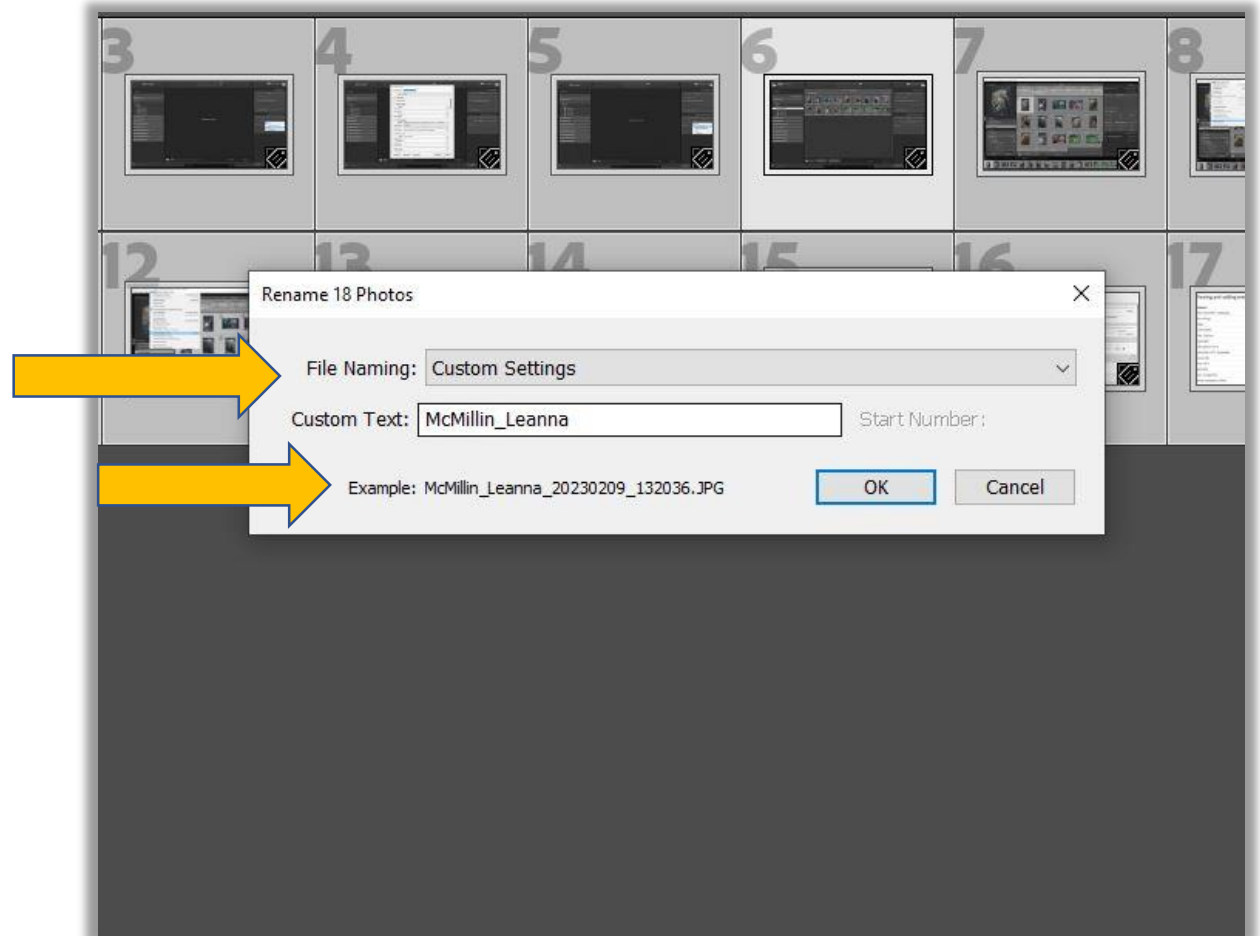
Name_Date(YYYYMMDD)_HHMMSS

Where “Name” is either the name of the image creator or collector, followed by the date and time the image was created. In the example shown, the “Custom Text” is where you will enter the name, the rest of the information will auto populate.

Batch Rename Files

The “Custom Text” will be the same for each image, followed by the metadata options you selected. You will see an example of the file name displayed.

Other custom text string examples include project identifiers (ex: NSF_24601) or information about the image such as “SEM” or “micrograph”



Batch Rename Files

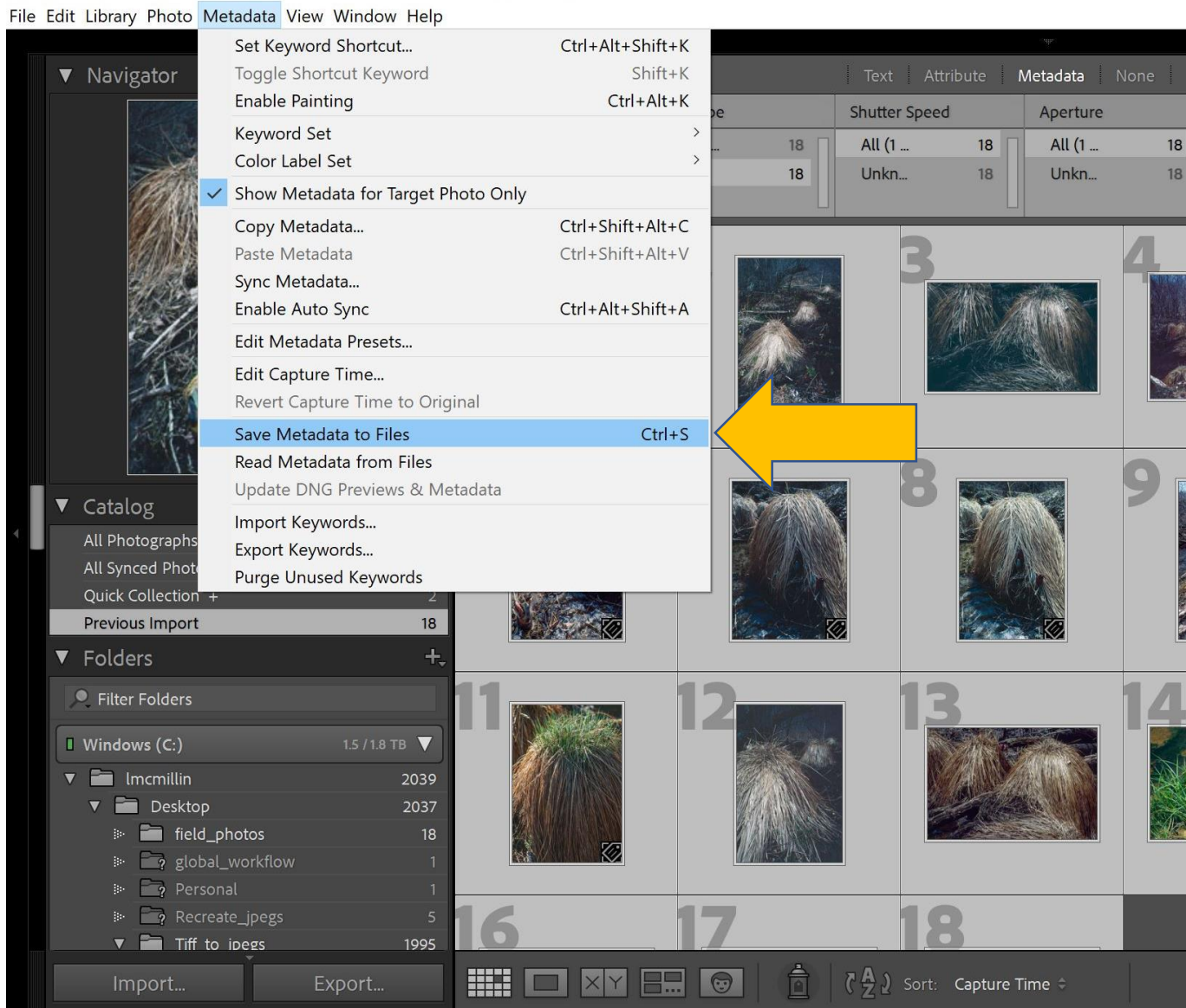
Remember:

- Use only: Letters a-z, 0-9, hyphen or underscore
No spaces, punctuation, symbols, or accents
- Less than 35 characters
- Dates must follow ISO 8601 standard (ex: YYYYMMDD or YYYY_MM_DD)
- If using suffixes, always use leading zeros (-01 or -001)
- Avoid using taxonomic names in the file name. If the associated voucher is reidentified the file name visible on the VH will no longer match the current name.

****Note that your file naming convention will have an effect on how easily you will be able to batch rename your files.****

For example, the Collector_CollectorNumber-suffix format will only allow you to batch rename a handful of images at a time – or possibly only one at a time – depending on how many images were captured per collection number.

Saving metadata to your image files



When you are done adding metadata to your images, it is critical that you save this data to the image files.

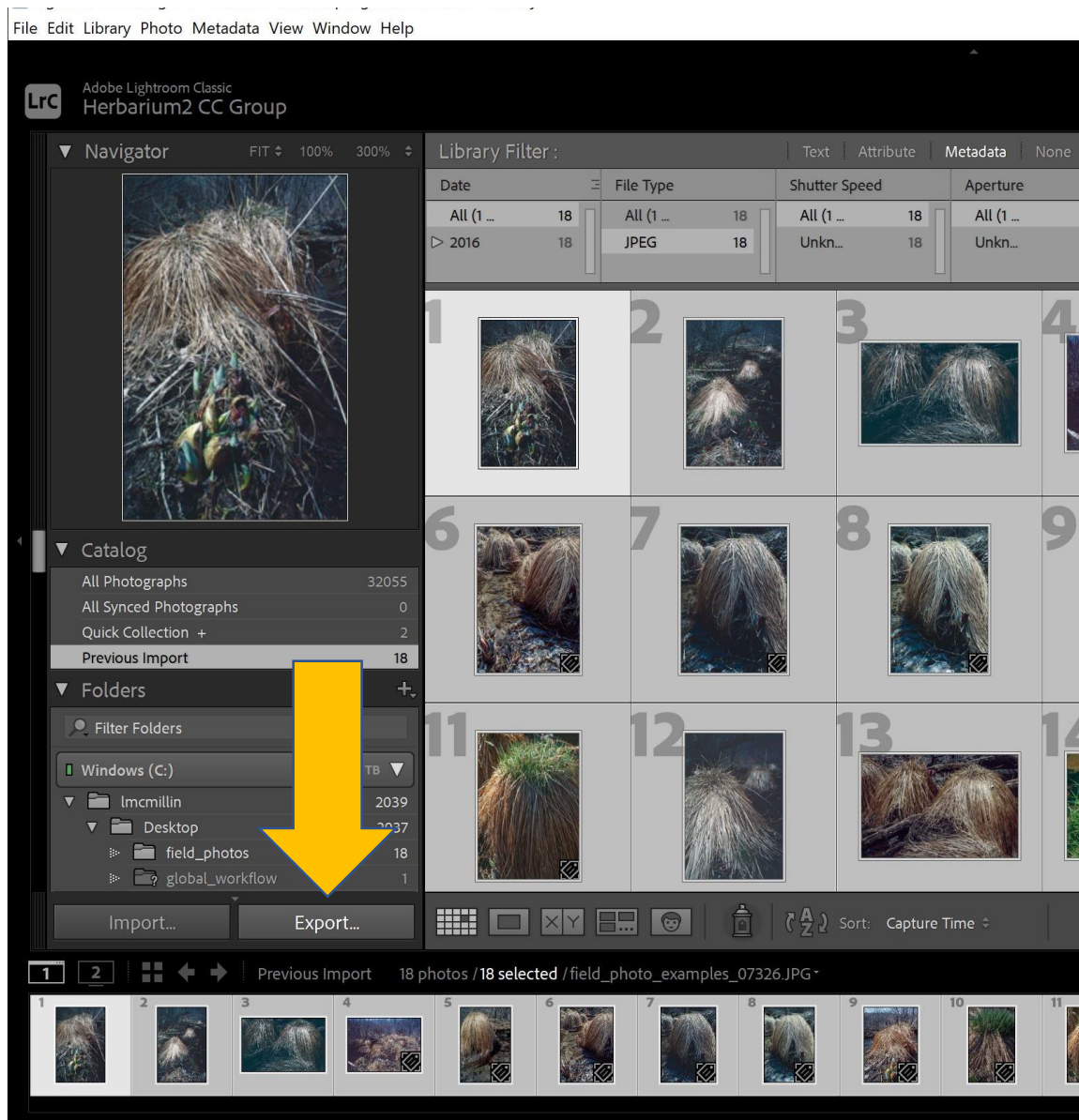
To ensure this, select all images and navigate to “Save Metadata to Files” under the Metadata menu at the top left of the program. Or, select all images and press Ctrl+S

Editing Images in the Develop Module

- Lightroom is a non-destructive editing software. This means you can apply edits to your images without making changes to the original file.
- The Develop module allows you to make edits such as cropping, color correction, and much more. These edits will be applied to the derivative files you export (see [“Exporting Photos”](#) in this guide). To learn more about the Develop module see Adobe’s tutorial:

[Edit Photos in the Develop Module](#)

Exporting photos



If you've saved metadata to your image files, have not made other edits in LrC, and your files are formatted as jpegs, there is no need to export the images.

If you have made edits to your photos (cropping, color balance, exposure etc.) you must export the images for these edits to be saved. Lightroom is a non-destructive editing software which means it does not make changes to the original files.

Although EMu can accommodate multiple types of image files, we request that you export your photos as JPEGs. This file format is best for web viewing. **If you do not export your images as JPEGs, the Digital Asset Manager will convert them to JPEGs prior to EMu import.**

The Export button is in the **Library Module**

Exporting photos

Export 18 Files

Export To: **Hard Drive**

Preset:

- ▶ Lightroom Presets
- ▶ User Presets

The Export dialog box allows you to customize how your photos will be exported.

Post-Process Actions:

- ▼ LR/Transporter
 - ▶ Keyword Exporter

Export 18 Files

▼ **Export Location**

Export To: Specific folder

Folder: C:\Users\lmcmillin\Desktop\field_photos **Choose...**

Put in Subfolder: **Untitled Export**

Add to This Catalog Add to Stack: **Below Original**

Existing Files: Ask what to do

▼ **File Naming**

Rename To: **Custom Settings**

Custom Text: **Mori_Scott_24601** Start Number: **1**

Example: Mori_Scott_24601-01.jpg Extensions: **Lowercase**

▶ **Video**

▼ **File Settings**

Image Format: **JPEG** Quality: **60**

Color Space: **sRGB** Limit File Size To: **4000** K ⓘ

▶ **Image Sizing** 600 ppi

▶ **Output Sharpening** Sharpening Off

▼ **Metadata**

Include: **All Metadata**

Remove Person Info Remove Location Info

Write Keywords as Lightroom Hierarchy

Plug-in Manager...

Done **Export** Cancel

Exporting photos

The screenshot shows the 'Export 18 Files' dialog in Adobe Lightroom. The 'Export To' dropdown is set to 'Hard Drive'. The 'Export Location' section shows the folder path 'C:\Users\jcmillin\Desktop\field_photos' and options for subfolders and catalogs. The 'File Naming' section has 'Rename To' checked with 'Custom Settings', a custom text 'Mori_Scott_24601', and a start number of '1'. The 'File Settings' section shows 'Image Format' as 'JPEG', 'Quality' as '60', and 'Limit File Size To' as '4000 K'. The 'Metadata' section has 'Include' set to 'All Metadata'. Annotations with yellow arrows point to these settings from text boxes on the left.

Export To: Hard Drive

Preset: Lightroom Presets, User Presets

Select the export location. This is where your files will be saved.

If you will rename your files during the export, you can do so here. See “[Batch Renaming](#)” in this guide for information on the Filename Template Editor.

Please export your photos as JPEGs and limit the file size to 4000 K

INCLUDE ALL METADATA IN YOUR EXPORT

Export Location: Export To: Specific folder, Folder: C:\Users\jcmillin\Desktop\field_photos, Put in Subfolder: Untitled Export, Add to This Catalog, Add to Stack: Below Original, Existing Files: Ask what to do

File Naming: Rename To: Custom Settings, Custom Text: Mori_Scott_24601, Start Number: 1, Example: Mori_Scott_24601-01.jpg, Extensions: Lowercase

File Settings: Image Format: JPEG, Quality: 60, Color Space: sRGB, Limit File Size To: 4000 K

Image Sizing: 600 ppi

Output Sharpening: Sharpening Off

Metadata: Include: All Metadata, Remove Person Info, Remove Location Info, Write Keywords as Lightroom Hierarchy

Done Export Cancel

Options for Delivering Images

Once you are finished applying the required metadata to your images, you can send your images to the herbarium Digital Asset Manager.

If you are an NYBG employee: You can save your images to the Pub drive in the following location:

"X:\Pub\Herbarium\Digital_asset_management\Field_photos
\Photos_for_EMu"

Please use this file naming format for your folder:

LastName_YYYY-MM-DD_#OfImages
(example: McMillin_2023-02-09_1000)

You may also save the images to an external drive and drop them off in the Herbarium Information Management office (directly across from Room 402, near the Imaging Lab). Please email lfeder@nybg.org to coordinate a drop off time, or to alert her to images you've saved on the Pub drive.

All other users: Please discuss with the Digital Asset Manager the best option for transferring your files.

**The William and Lynda Steere Herbarium thanks you
for your contributions to our Virtual Herbarium!**