



Preparing Images for EMU Ingestion at NYBG:

A Guide to Adding Required Metadata using Excel

Leanna Feder, Digital Asset Manager
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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/>).

Preparing Images for EMU Ingestion at NYBG:

A Guide to Adding Required Metadata using Excel

This guide is intended to instruct users how to supply the required and recommended image metadata for field photos, prior to import into EMu. All field photos 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.

NYBG's Excel Metadata Template for Field Photos

The Excel Metadata template is specifically designed for capturing metadata required and recommended for ingesting field photographs into EMu at NYBG. The template organizes the relevant EMu metadata fields along the top row of the workbook. Metadata field names, explanations of each field, and examples of correctly formatted metadata occur in rows 2-4.

To access the file:

NYBG Users: The file can be accessed on the Pub drive:
"X:\Pub\Herbarium\Digital_asset_management\Field_photos\EXCEL\Excel_Field_Photo_Metadata_Template.xlsx"

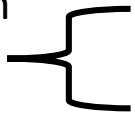
All other users: Request file from Herbarium Digital Asset Manager
(lfeder@nybg.org)

Required Metadata Fields

Required fields are indicated on the Excel sheet in green.

	A	B	C	D	E
1	EMu Field Name		MulCreatorsRef_tab(1).NamBriefNam	SubScientificName_tab	ResCopyrightOwner
2	Field	Filename (= identifier)	Creator	Scientific Name	Copyright Owner
	Format	REQUIRED. File names must be unique (within EMu, and ideally globally). See File naming standards for more information. We discourage the use of taxonomic names as these may change over time.	REQUIRED. Text. Name of photographer (preferably full name: first name, middle initial, last name. Could be name of an organization)	REQUIRED. Text. Scientific name of the plant captured in the image, including authors.	REQUIRED. Text. A list of the names of the owners of the copyright. 'Unknown' is an acceptable value, but 'Public Domain' is not. If the image is considered 'Public Domain', leave this field blank, and enter 'Public Domain' in the Copyright Statement.
3	Example	Daly_20111204_093019.jpg	Douglas C. Daly	Iryanthera Warb.	Douglas C. Daly
4					
5	Start here →				
6					

A brief description of each field and an example of properly formatted metadata can be found in rows 3 and 4.



Conditionally Required Fields

Conditionally required metadata fields are indicated on the Excel sheet in yellow.

	G	H	I	J	K	L
1		ResLicenseStatement	ResLicenseURL	ResAttributionStatement		
2	File Path	Licence Statement	License URL	Attribution Statement	Collector	Collection Number
	REQUIRED. The full path to the resource.	REQUIRED if using Creative Commons License. License Terms: The license statement defining how resources may be used. For information on how to license your images so that they may be used by others please see: https://creativecommons.org/share-your-work/ This section should read "This work is licensed under a Creative Commons [INSERT LICENSE NAME] License"	REQUIRED if using a Creative Commons license. The URL describing the legal code of the license, found on the CC website for each license.	REQUIRED if using Creative Commons License. The attribution statement stipulates how users should attribute the image.	REQUIRED if image is associated with a vouchered NY collection. Text. Full name of the primary collector who collected the specimen in the photograph.	REQUIRED if image is associated with a vouchered NY collection. Text. The number assigned to the collection by the collector.
3						
4	C:\Field_Photos\Daly_20111204_093019.jpg	This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.	https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode	Photograph by Douglas C. Daly	Wendeson Castro (W. Castro)	70
5						
6						



If you send your images to the Digital Asset Manager via an external hard drive, or via the Public "X" drive (NYBG users only) you must include the full path to the resource. The full path can be found by holding shift and right clicking on the file (or multiple files), then selecting "copy as path."

Conditionally Required Fields

Conditionally required metadata fields are indicated on the Excel sheet in yellow.

	G	H	I	J	K	L
1		ResLicenseStatement	ResLicenseURL	ResAttributionStatement		
2	File Path	Licence Statement	License URL	Attribution Statement	Collector	Collection Number
3	REQUIRED. The full path to the resource.	REQUIRED if using Creative Commons License. License Terms: The license statement defining how resources may be used. For information on how to license your images so that they may be used by others please see: https://creativecommons.org/share-your-work/ This section should read "This work is licensed under a Creative Commons [INSERT LICENSE NAME] License"	REQUIRED if using a Creative Commons license. The URL describing the legal code of the license, found on the CC website for each license.	REQUIRED if using Creative Commons License. The attribution statement stipulates how users should attribute the image.	REQUIRED if image is associated with a vouchered NY collection. Text. Full name of the primary collector who collected the specimen in the photograph.	REQUIRED if image is associated with a vouchered NY collection. Text. The number assigned to the collection by the collector.
4	C:\Field_Photos\Daly_20111204_093019.jpg	This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.	https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode	Photograph by Douglas C. Daly	Wendeson Castro (W. Castro)	70
5						
6						

The License Statement, License URL, and Attribution Statement fields are required if using a Creative Commons License. [We strongly encourage the use of Creative Commons licenses.](#)

Conditionally Required Fields

Conditionally required metadata fields are indicated on the Excel sheet in yellow.

	G	H	I	J	K	L
1		ResLicenseStatement	ResLicenseURL	ResAttributionStatement		
2	File Path	Licence Statement	License URL	Attribution Statement	Collector	Collection Number
3	REQUIRED. The full path to the resource.	REQUIRED if using Creative Commons License. License Terms: The license statement defining how resources may be used. For information on how to license your images so that they may be used by others please see: https://creativecommons.org/share-your-work/ This section should read "This work is licensed under a Creative Commons [INSERT LICENSE NAME] License"	REQUIRED if using a Creative Commons license. The URL describing the legal code of the license, found on the CC website for each license.	REQUIRED if using Creative Commons License. The attribution statement stipulates how users should attribute the image.	REQUIRED if image is associated with a vouchered NY collection. Text. Full name of the primary collector who collected the specimen in the photograph.	REQUIRED if image is associated with a vouchered NY collection. Text. The number assigned to the collection by the collector.
4	C:\Field_Photos\Daly_20111204_093019.jpg	This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.	https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode	Photograph by Douglas C. Daly	Wendeson Castro (W. Castro)	70
5						
6						

Collector/Collector number is required for images associated with a vouchered NY collection.

Recommended Fields

Recommended metadata fields are indicated on the Excel sheet in grey.

	M	N	O	P	Q	R	S	T	U	V	W
1	MuTitle	MuDescription		SubSubjectPart_tab							
2	Title	Description	Plant Family	Subject Part	NY Barcode	Country	State/Prov	Subject/Keywords	Subject/Keywords	Subject/Keywords	Language
3	Text. The concise title, name, or brief descriptive label of the individual resource. We discourage the use of scientific names in this field.	Text. An account or description of the content of the resource as free-form text, preferably containing the Who, What, When, Where and Why; for instance a description of an image, an abstract or table of contents of a text document.	Text.	The portion or product of organism morphology, behaviour, environment, etc. that is either predominantly shown or particularly well exemplified by the media resource. 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.	Text. NY Barcode number, if known. Please add this whenever possible.	Text. The geographic location of the specific object(s) documented in the resource (e.g. country in which plant was growing when photographed in the field)	Text. State or province in which plant was growing when photographed, if known.	Text. Individual keywords by which to search for and/or group this image with others like it. Examples include: Plant family, plant part, habitat type, plant habit, life stage, common name	Text. Not a controlled vocabulary.	Text. Not a controlled vocabulary.	Text. Represents the language of the Title, Description, and any other metadata (but not necessarily the text within the image itself). eng = English spa = Spanish por = Portuguese
4	Field photo of S. Mori 15675.	Field photograph of W. Castro 70 from Rondônia, Brazil.	Myristicaceae	Leaf; Venation	02880037	Brazil	Rondonia	Wendeson Castro (W. Castro)	Brazil	Field photograph	eng

We recommend adding as much metadata as possible to your images, this will greatly improve their findability within EMu and on the Virtual Herbarium.

Recommended Fields

Recommended metadata fields are indicated on the Excel sheet in grey.

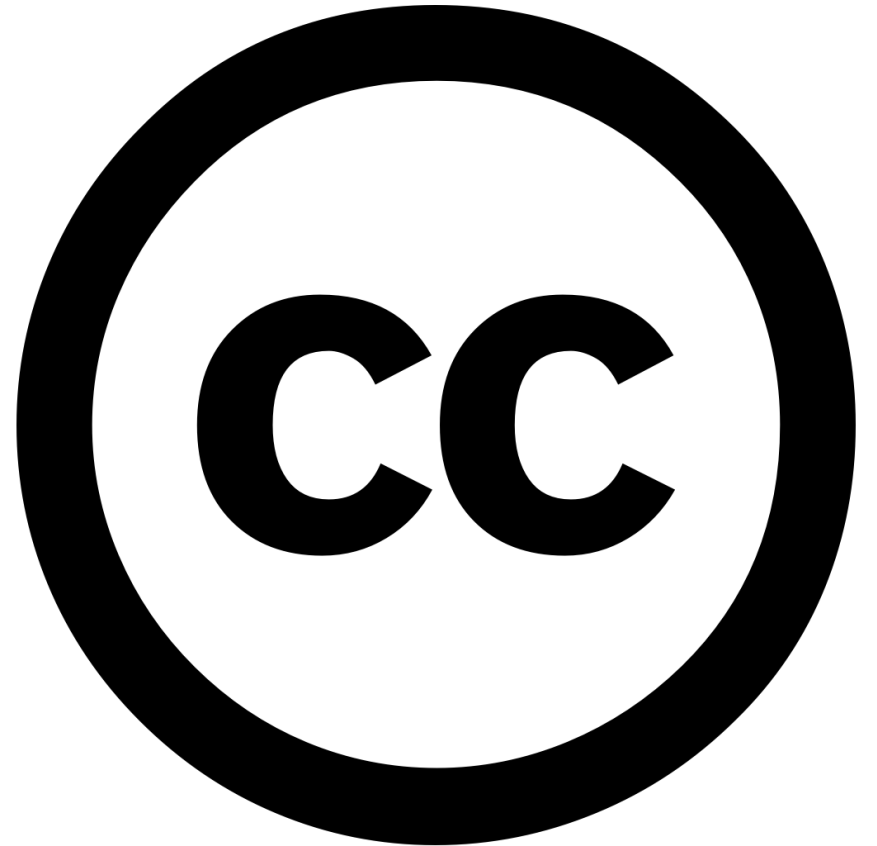
	M	N	O	P	Q	R	S	T	U	V	W
1	MuTitle	MuDescription		SubSubjectPart_tab							
2	Title	Description	Plant Family	Subject Part	NY Barcode	Country	State/Prov	Subject/Keywords	Subject/Keywords	Subject/Keywords	Language
	Text. The concise title, name, or brief descriptive label of the individual resource. We discourage the use of scientific names in this field.	Text. An account or description of the content of the resource as free-form text, preferably containing the Who, What, When, Where and Why; for instance a description of an image, an abstract or table of contents of a text document.	Text.	The portion or product of organism morphology, behaviour, environment, etc. that is either predominantly shown or particularly well exemplified by the media resource. 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.	Text. NY Barcode number, if known. Please add this whenever possible.	Text. The geographic location of the specific object(s) documented in the resource (e.g. country in which plant was growing when photographed in the field)	Text. State or province in which plant was growing when photographed, if known.	Text. Individual keywords by which to search for and/or group this image with others like it. Examples include: Plant family, plant part, habitat type, plant habit, life stage, common name	Text. Not a controlled vocabulary.	Text. Not a controlled vocabulary.	Text. Represents the language of the Title, Description, and any other metadata (but not necessarily the text within the image itself). eng = English spa = Spanish por = Portuguese
3	Field photo of S. Mori 15675.	Field photograph of W. Castro 70 from Rondônia, Brazil.	Myristicaceae	Leaf; Venation	02880037	Brazil	Rondonia	Wendeson Castro (W. Castro)	Brazil	Field photograph	eng
4											

The "Subject Part" field is a partially controlled vocabulary, for a list of terms already in use in EMu, see the "Subject Part Keywords" sheet in the Excel document.

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](#). **We strongly encourage the use of Creative Commons (CC) licenses when publishing images on the Virtual Herbarium.**

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

- 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 (lmcmillin@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).

Options for Delivering Images

Once you are finished entering the required metadata to for 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 lmcmillin@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!**