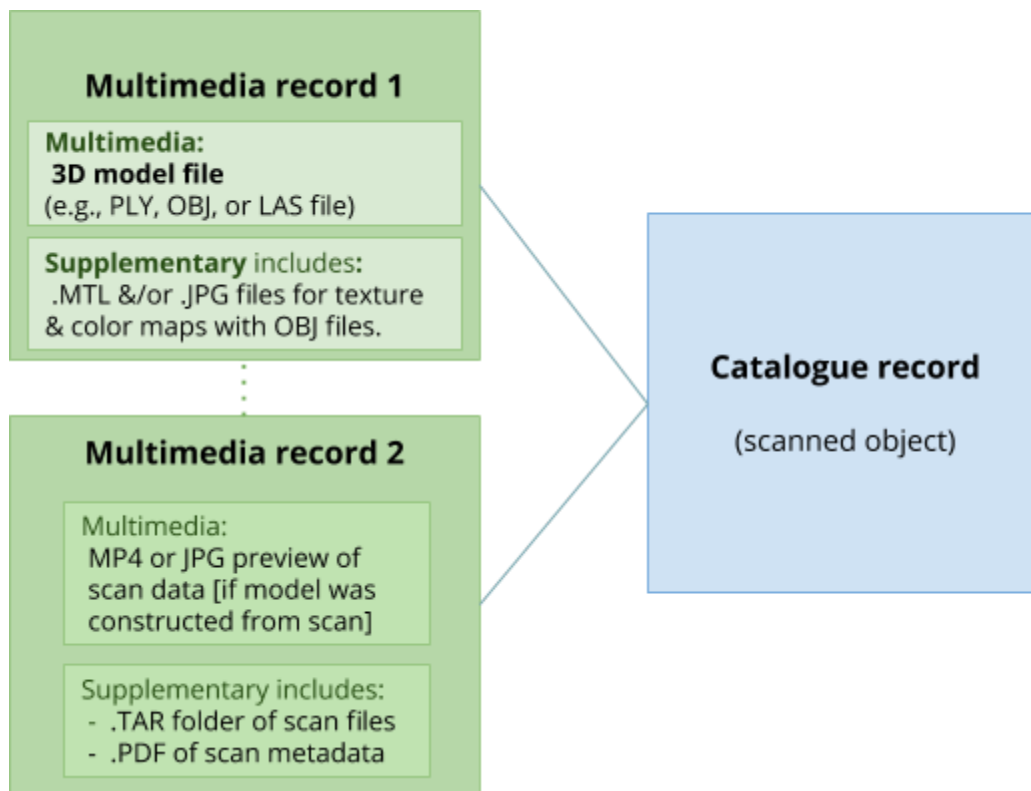


# How to Catalog a 3D Model (PLY or OBJ) in EMu



## Overview:

[I\) When can 3D Models be archived in EMu?](#)

[II\) Make a Multimedia Record for a 3D Model](#)

[III\) Attach Multimedia to the Scanned Object's Catalogue Record](#)

## I) When can 3D Models be archived in EMu?

A 3D model can be archived in EMu using methods described here if all of the following conditions are met:

- The model represents a Field Museum specimen or object or related data  
(e.g., *environmental reconstruction*)
- The model is owned by the Field Museum -- i.e., its copyright and license are documented.

## II) Make a Multimedia Record for a 3D Model

If the museum has rights to archive a 3D model, set up a Multimedia record for it like so:

1. On the **Multimedia tab**, fill in these fields:

*(Required)*

**Title** = Brief title, e.g. "[Specimen number or taxon] 3D model"

**Description** = A brief description of the 3D model.

**Creator** = Attach party record(s) for who constructed the model.

**Role** = "Digital Modeler" for creators of the model. Indicate role/s filled by any other creator/s.


Try to use existing values from the lookup list → 

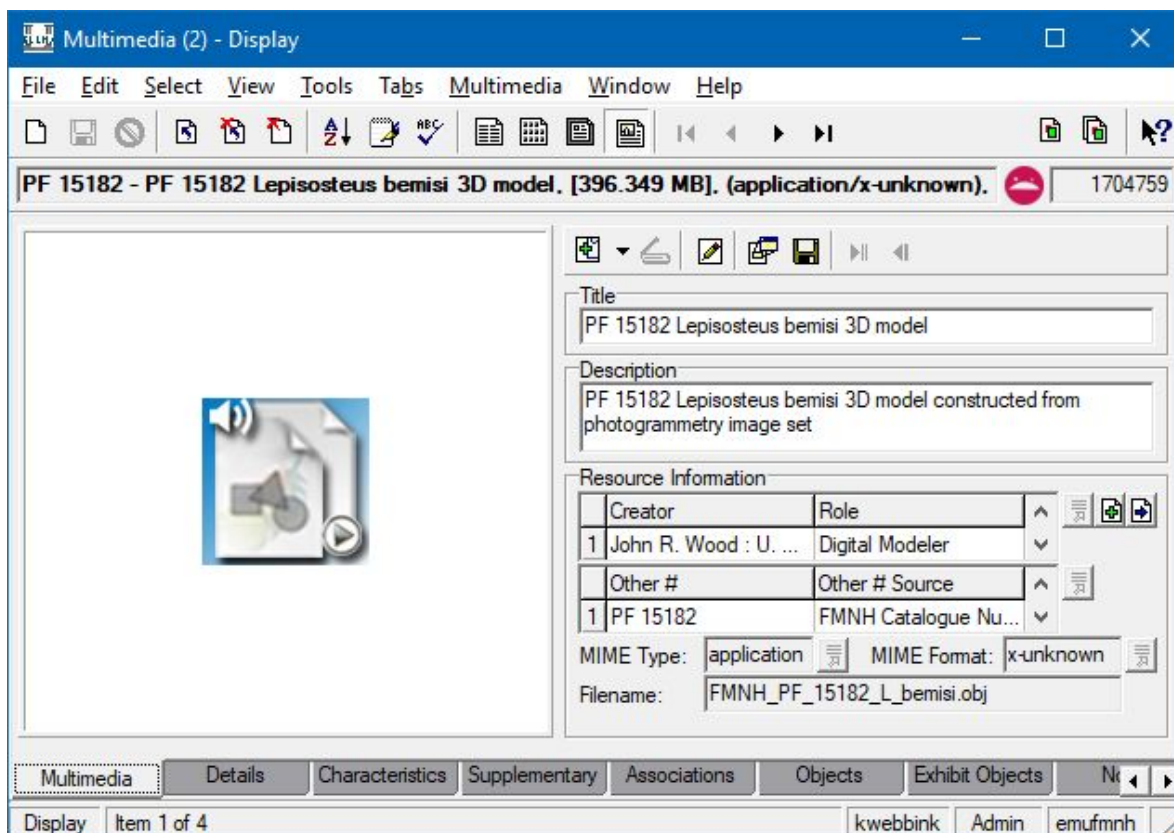
**Multimedia [big white box]** -- Add the 3D model file (e.g., OBJ, PLY, or LAS file)

*(Optional - If the scan is of an FMNH specimen/artifact this is required.)*

**Other #** = Any catalogue/inventory/other numbers related to the 3D model.

**Other # Source** = What type of number, e.g., "FMNH Catalogue Number" for specimen #s

Try to use existing values from the lookup list → 



The screenshot shows a software window titled "Multimedia (2) - Display". The menu bar includes File, Edit, Select, View, Tools, Tabs, Multimedia, Window, and Help. The toolbar contains various icons for file operations and viewing. The main content area displays a 3D model of a fish, identified as "PF 15182 - PF 15182 Lepisosteus bemisi 3D model. [396.349 MB]. (application/x-unknown)".

On the right side, there are several input fields and a table:

- Title:** PF 15182 Lepisosteus bemisi 3D model
- Description:** PF 15182 Lepisosteus bemisi 3D model constructed from photogrammetry image set
- Resource Information:**

Creator	Role
1 John R. Wood : U. ...	Digital Modeler
- Other #:** 1
- Other # Source:** FMNH Catalogue Nu...
- MIME Type:** application
- MIME Format:** x-unknown
- Filename:** FMNH\_PF\_15182\_L\_bemisi.obj

At the bottom, there are tabs for Multimedia, Details, Characteristics, Supplementary, Associations, Objects, Exhibit Objects, and a navigation bar showing "Display Item 1 of 4".

2. On the **Details tab**, fill in these fields:

**Subject/Keyword** = “3D model”, and any other relevant short tags for the model.

**Date** = Date the model was produced

**Description (of Date)** = “Date Created” or other value from the lookup list.

**Resource Type** = Image | 3D model

**Rights** = Attach the Rights record for “© The Field Museum CC BY-NC” (Rights in 46)

- Check first to make sure the museum owns the data.
- To license the data more strictly as “© Field Museum”, use Rights in 36, but consider the [FMNH collections data norms](#)

**Source** = Collection from which objects were scanned.

Multimedia (2) - Edit

File Edit Select View Tools Tabs Multimedia Window Help

PF 15182 - PF 15182 *Lepisosteus bemisi* 3D model. [396.349 MB]. (application/x-unknown). 1704759

Subject/Keywords

1 3D model

Publisher

Other Contributor(s)

Contributor	Role
*	

Relation

\*

Connection Details

Connection ID	Connection Kind
*	

Resource Details

Date	Description
1 24 Jan 2018	Date Created

Source:

Resource Type: Image | 3D model

Language: \*

Coverage

Rights

(c) Field Museum of Natural History - CC BY-NC

Multimedia Details Characteristics Supplementary Associations Objects Exhibit Objects New

Edit Item 1 of 4 kwebbink Admin emufmnh

3. On the **Supplementary tab**, add Supplementary files for the 3D model:

For example, OBJ geometry files can be accompanied by MTL and/or JPG files for texture/color mapping.

To upload a supplementary file:

- 1) Click the green plus near the lower-right of the tab.
- 2) Browse to the file, and upload it.
- 3) Save the Multimedia record to complete the upload.

For each supplementary file:

**Usage** = the file's intended/allowed uses. (e.g., "Research" and "Archival")

**Notes** = Further explanation on the file's purpose, requirements, or how to use it.

Multimedia (1) - Display

File Edit Select View Tools Tabs Multimedia Window Help

PF 15182 - PF 15182 Lepisosteus bemisi 3D model. [396.349 MB]. (application/x-unknown). 1704759

Supplementary Attributes

Identifier: FMNH\_PF\_15182\_L\_bemisi.mtl

Width (pixels): Height (pixels):

MIME Type: application MIME Format: x-unknown

File Size (bytes): 388

MD5 Checksum: b7594dc7aca8ea15812fc08953d41d6f

Supplementary Attributes

Usage: 1 Research 2 Archival

Notes: Material and texture map file associated with the main OBJ 3d model file, and containing references to JPG files for coloration.

Supplementary

Identifier	Usage	MIME Type	MIME Format	Width (pixels)	Height (pixels)	File Size (bytes)
1 FMNH_PF_15182_L_b...	Research,...	application	x-unknown			388
2 FMNH_PF_15182_L_b...	Research,...	image	jpeg	4096	4096	1660562
3 FMNH_PF_15182_L_b...	Research,...	image	jpeg	4096	4096	2190978

Multimedia Details Characteristics Supplementary Associations Objects Exhibit Objects Next

Display Item 21 of 21 kwebbink Admin emufmnh

4. On the **Associations** tab:

Attach related Multimedia records if any exist, e.g.:

- URL for published model hosted in an external repository (e.g., MorphoSource)
- Lower/Higher-resolution versions of this Model
- Images derived from this 3D model
- Raw data used in the construction of this 3D model  
(e.g., CT or LIDAR scan dataset, or Photogrammetry image set)

**Media** = Attach the related Multimedia record here

**Relationship** = What is the related media relative to this record? (e.g., 3D Constructed Model)

Multimedia (2) - Display

File Edit Select View Tools Tabs Multimedia Window Help

PF 15182 - PF 15182 Lepisosteus bemisi 3D model. [396.349 MB]. (application/x-unknown). 1704759

Is Parent?  
☐ Yes ☒ No

Child Parent Media:

Child Media

Related Media

	Media	Relationship
1	PF 15182 - PF 15182 Lepisosteus bemisi Photogrammetry image	Raw Data
*		

Notes:

Multimedia Details Characteristics Supplementary Associations Objects Exhibit Objects Navigation

Display Item 1 of 4 kwebbink Admin emufmnh

5. On the **Security** tab, fill in these fields:

**Publish on Internet** = Yes (if ready/licensed to publish)

- **Check first to make sure the data is not embargoed.**

**Department** = [Name of Your Department]

6. Save the record.

### III) [Attach Multimedia to the Scanned Object's Catalogue Record](#)