

DIGITIZATION WORKFLOW



LIGHTNING ROUND

1. Paul Mayer, Field Museum, Invert Paleo
2. Catherine Riddle, Duke, Vert Paleo (primates)
3. Patricia Weaver, North Carolina Museum of Natural Sciences, Geology and Paleo
4. Shusheng Hu, Yale Peabody Museum, Paleobotany
5. Ronald Eng, Burke Museum, Vert Paleo
6. Rudy Serbet, Natural History Museum, University of Kansas
7. Kate Wellspring, Beneski Museum of Natural History, Amherst College, Paleo

IMLS Silurian Reef Digitization Project

Each intern has a set of fossils that they cycle through the three work stations.

Goal: to digitize 31,000 Silurian reef fossil invertebrates from the FMNH and MPM collections.



2. Fossil
Photography
Station

3. KE EMu
Data Entry
Station

1. Label
Photography
Station





Duke Lemur Center Division of Fossil Primates



MorphoSource

morphosource.org/index.php/Detail/MediaDetail/Show/media_id/377

ABOUT BROWSE DASHBOARD

MORPHO SOURCE

Media: M377

Specimen Information

Specimen: [DPC-24801_Megaladapis madagascariensis](#)
Specimen taxonomy: *Megaladapis madagascariensis*
Institution: Duke Lemur Center Division of Fossil Primates, Durham, NC, USA

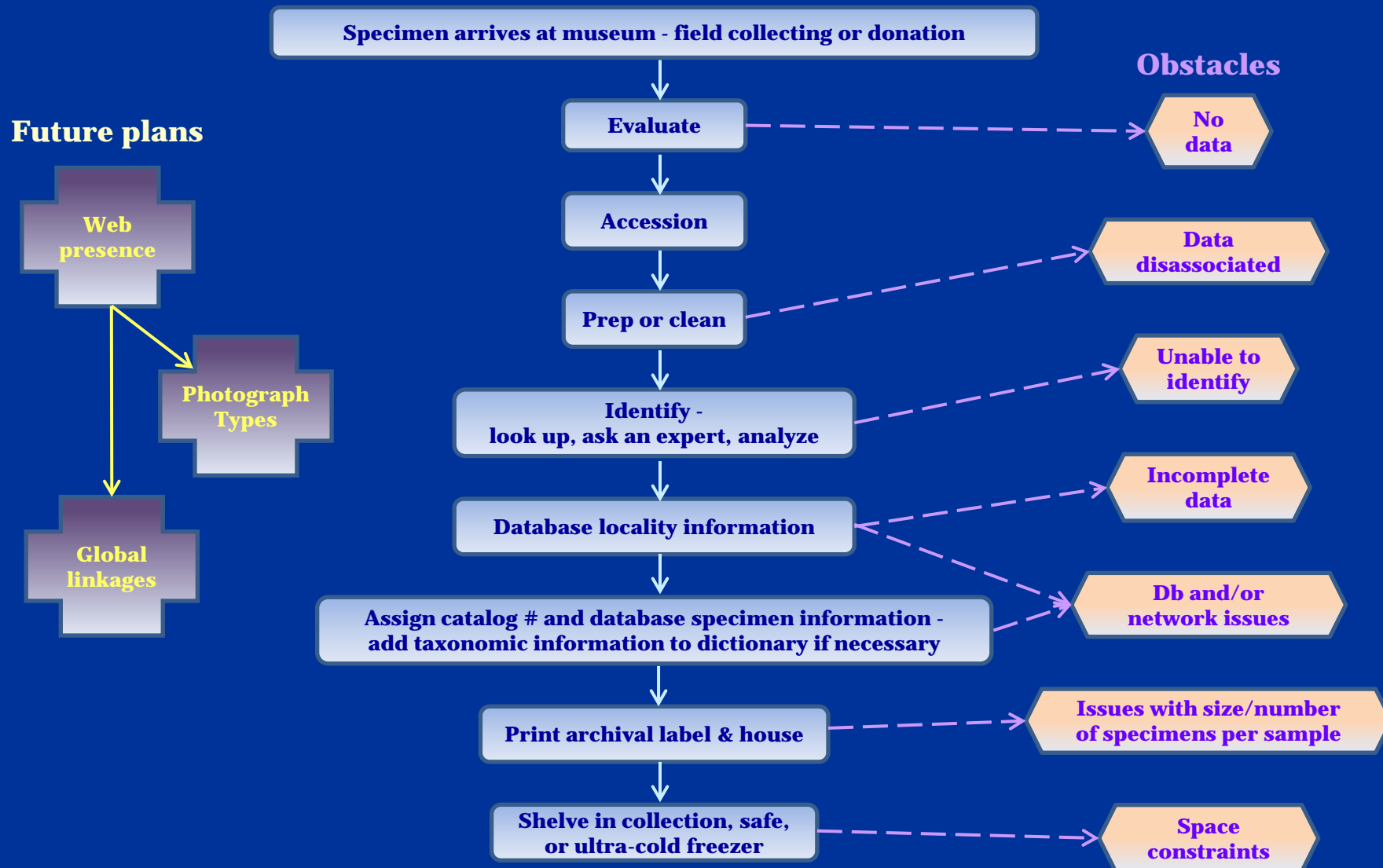
Scan Information

Type: Video (MPEG-4)
Filesize: 2.09 MB
Is this media copyrighted?: Yes
Copyright permission: Permission to use media on MorphoSource granted by copyright holder
Copyright Holder: Duke University Fossil Collection
Facility: Duke SMIIF
X res: 0.125351047001613 mm
Y res: 0.125351047001613 mm
Z res: 0.125351047001613 mm
Voltage: 195 kv
Amperage: 174 µA
Projections: 3142
Frame averaging: 2

REQUEST DOWNLOAD OF MEDIA

Digitization of the 128,988 specimens of the North Carolina Museum of Natural Sciences Geology/Paleontology Collections Patricia G. Weaver

Workflow

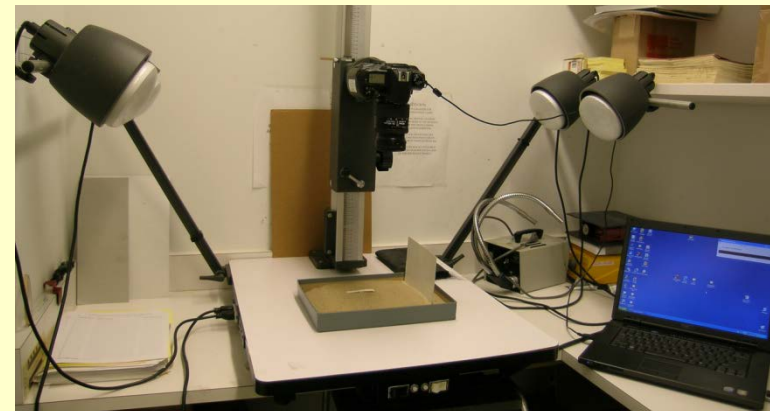


Digitization of Paleobotanical Type Specimens at the Peabody Museum

Shusheng Hu

Division of Paleobotany, Peabody Museum, Yale University, New Haven, CT 06511

- About 4500 paleobotanical type specimens
- From about 120 papers published between 1849 to 2011
- Digitization workflow
 1. Verify specimen information
 2. Catalogue specimens
 3. Photograph specimens by Nikon digital camera D100 and software Nikon Camera Control Pro 2
 4. Check image quality and rename images with specimen numbers by Adobe Bridge CS4
 5. Edit images



Ron Eng

Burke Museum Paleontology Collections

<http://www.burkemuseum.org/paleontology>

Invertebrate Paleontology, macrofossils	1,600,000 specimens
Invertebrate Paleontology, microfossils	2,000,000 specimens
Vertebrate Paleontology	58,000 specimens
Paleobotany	56,000 specimens
Recent Mollusca	240,000 specimens



iDigBio

select specimens to be digitized

do an initial check and revision/correction of the collections data

pull the specimens

flag storage locations to facilitate return

bring specimens to the photographic work station

set up photographic work station: copy stand, camera and lights

check camera settings

format images (include scale)

capture images (multiple images of some specimens)

image associated data (sketches, maps, labels, etc.)

flag or mark specimens that have been imaged (include the date)

perform image quality control

rename image files (convention to be established)

add Exchangeable Image File Format (EXIF) metadata

upload images to FileMaker Pro database

0 5 10 mm UWBM no. 95394 Holocephali

Simplified Digitization Workflow

Division of Paleobotany

Natural History Museum and Biodiversity Research Institute

University of Kansas

Curate Specimens
(ID, number,
repair, etc.)



Enter Data (File
MakerPro)



Publish
online

Amherst College Digital Collections

acdc.amherst.edu

Beneski Museum of Natural History

- 10 collections; 10 FMPPro dbs; 200,000 objects; no public interface
- 2011: IT & Library explore how to create college-wide digital asset management and discovery system—selected a Fedora-based system—acdc.amherst.edu/wiki for details
- 2012: Beneski Museum invited to join—focus on ichnology collection database—approx 1,100 specimens
- 2013: clttn manager and digital projects librarians develop a metadata application profile and XML schema that draw upon elements of Darwin Core, Dublin Core, and local fields from the FMPPro db
- Challenges: extensive data clean-up required; perceived or actual lack of data presentation standards; for metadata—existing standards (e.g., Darwin Core) often less appropriate for paleontological clttns

Special thanks to K. Shepard, M. Fredette and K. Gerrity of the Frost Library, Amherst College