

Workflows for Digitizing Vertebrate Paleontology

Chris Norris

Division of Vertebrate Paleontology

Yale Peabody Museum

Workflow design is the most important part of the project



“If you fail to prepare,
you prepare to fail”

Mystery Men, 1999

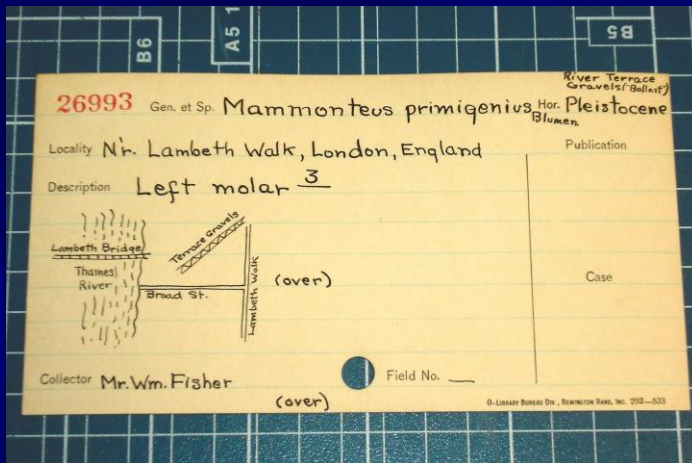
Challenges for VP

- Size range
 - Mammal teeth to dinosaur skeletons
 - Requires different imaging procedures
- May have many elements
 - Do you image all of them?
- Complex diagnostic characters
 - May need more than one image to document
- Prep and handling issues
 - May need multiple staff to move
 - May require preparation beforehand

What Are Your Aims?

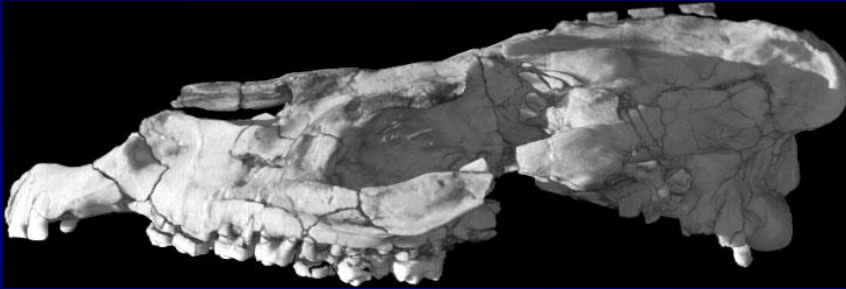
“Collections digitization is defined broadly to include **transcription into electronic format** of various types of data associated with specimens, the **capture of digital images** of specimens, and the **georeferencing** of specimen-collection localities.”

Transcription



- From catalog or from specimen?
 - If from Catalog, do you image the catalog as well – i.e. use O.I.D. on the catalog?
 - If from specimens, do you use O-I-D or do you just transcribe labels?
 - How will you ground-truth catalog data against specimen data and vice-versa?
- Who will transcribe?
 - On-site or off-site? Will you use students, volunteers, or contractors? How will you proof the data?
- How will you mobilize?
 - Direct entry to database or bulk upload from flat file?

Imaging

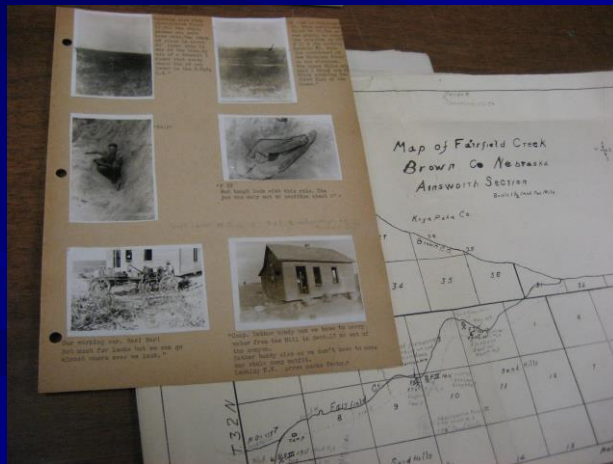
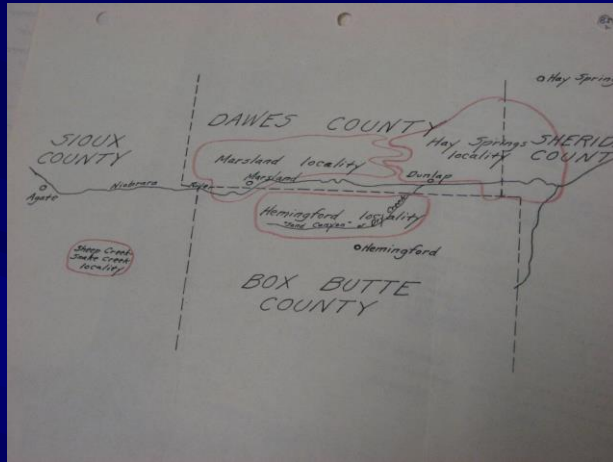


Imaging



- Image drawers or specimens?
- One image or multiple images?
- Fixed lighting or variable lighting?
- Where will you image?
- How will you transport specimens to/from imaging station?
- Who will do the imaging?

Georeferencing



- Digitize by collector/fieldtrip
 - Simplifies accessing archival data
- Prioritize based on number of specimens per locality
 - Editing one locality benefits many specimen records
- The curve of diminishing returns
 - What will give you most return for your effort?
 - What's the quickest way to make the data available?
 - One pass versus multiple passes?

Integration

- Other tasks don't stop while you digitize
 - Still have to process loans, visitors, enquiries, etc?
- Need to design workflows that integrate with other activities
 - every time you lay hands on a specimen, image it?
 - Image specimens when cataloging, moving, rehousing?
 - Duplicate catalog cards as a business continuity/emergency response activity?