

Steps Towards Digitizing and Organizing 175 years Worth of Natural History Data

A detailed scientific illustration of various prehistoric marine organisms. In the foreground, there is a large, dark-colored cephalopod with a prominent, pointed siphon. Behind it, several trilobites are depicted in various swimming or resting postures. A long, thin graptolite-like organism with a central axis and lateral branches is also visible. The background is a light tan color with faint outlines of a globe or a similar shape.

Dana J. Ehret, Ph.D.
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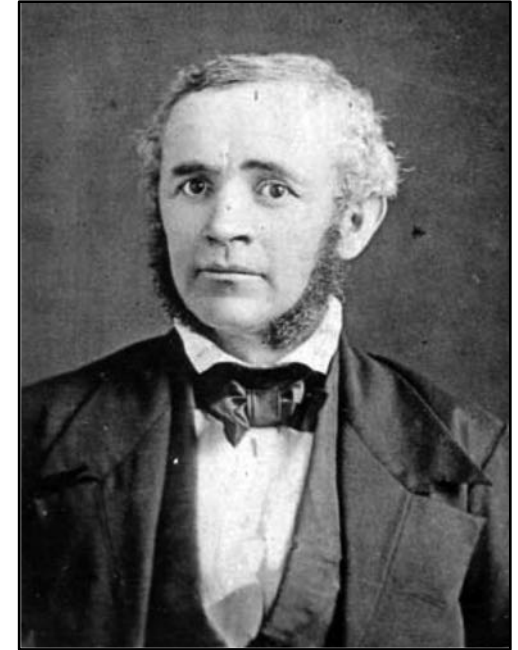


ALABAMA
Museum of Natural History
THE UNIVERSITY OF ALABAMA

THE UNIVERSITY OF
ALABAMA

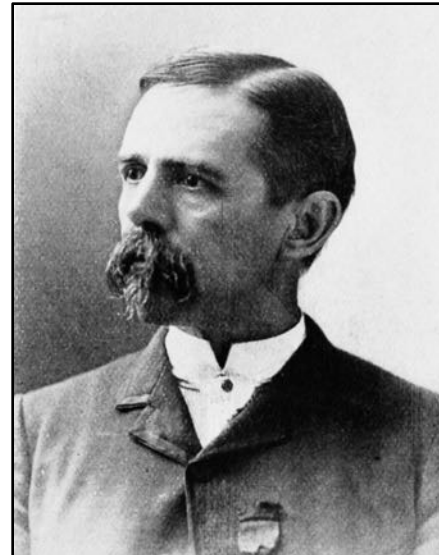
ALMNH Paleontology Collections

- Original collections created by Nuttall in Jan. 1831
- Michael Tuomey, first state geologist, 1840s
 - Charles Lyell collected fossils in Alabama
 - Most collections were lost during the campus



ALMNH Paleontology Collections

- Eugene Allen Smith salvaged and rebuilt collections as state geologist in the late 1800s-early 1900s
 - Half went to ALMNH, other half went to the GSA
 - With significant contributions by T.H. Aldrich



ALMNH Paleontology Collections

- Our collections today:
 - Over 9800 catalogued vertebrate fossils
 - Over 4500 catalogued invertebrate fossils
 - 725 catalogued plant fossils
- 1000s of more specimens that need to be sorted, prepared, identified, and catalogued



Collecting a mosasaur in 1930

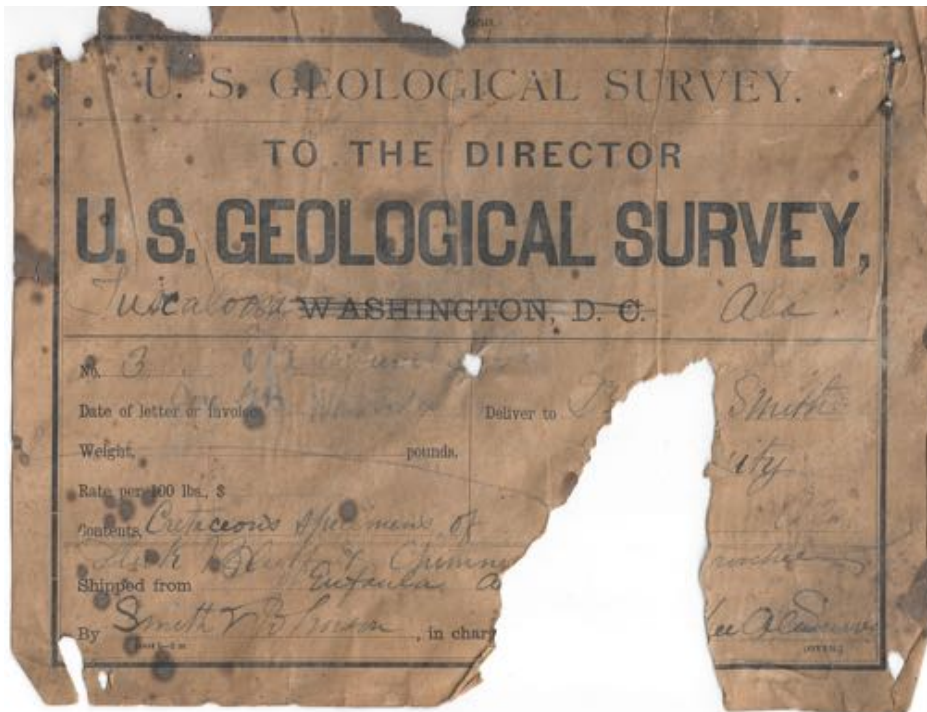
Cataloguing and Preparation of Specimens



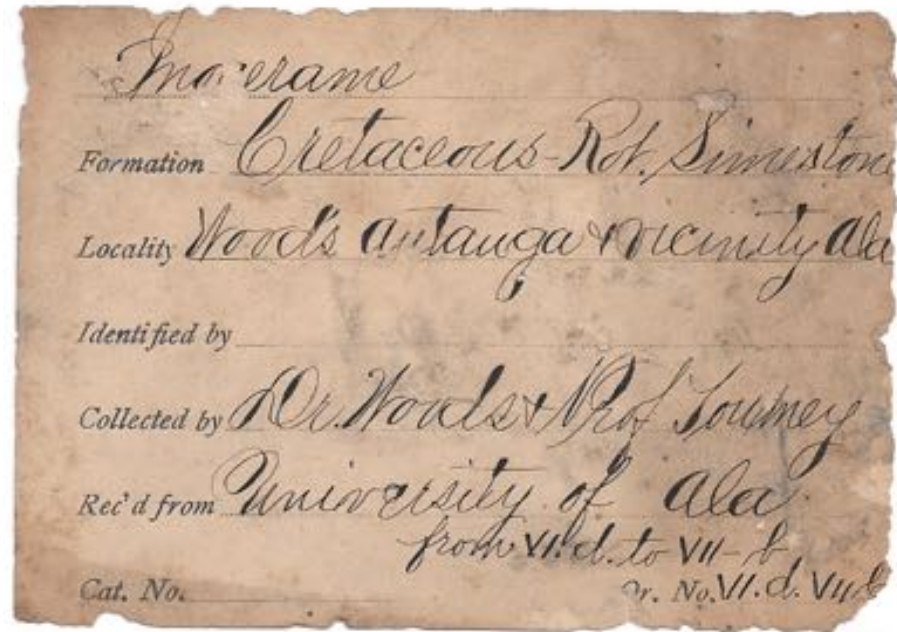
Dr. 'Bing' Blewitt hits 6,000
volunteer hours



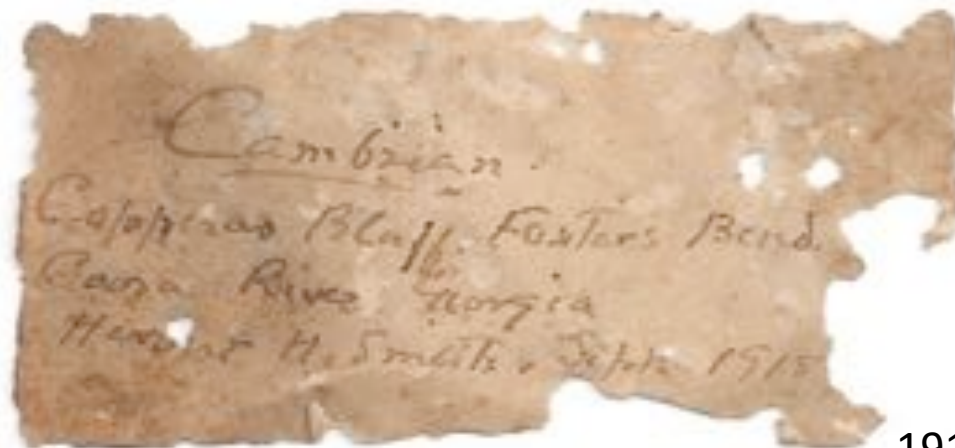
What are we dealing with?



1870-1880s?



pre-1870s?



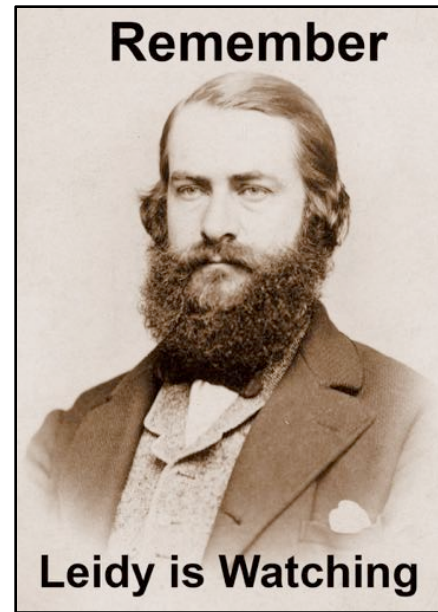
1915

What are we dealing with?



Where Does that Leave Us?

- \$\$\$
 - Recently submitted IMLS grant for the Invert Paleo Collections
 - Limited resources
 - Little budget, expensive rehousing supplies
 - Limited institutional support
- Database and Storage
 - Currently using FileMaker Pro
 - No server devoted to collections data storage
 - Shopping for new system
 - Arctos leading



Typical vertebrate paleo drawer

Where Does that Leave Us?

- Work Force
 - Department of four
 - Rely on work study students and volunteers
- Prioritize
 - Invertebrate paleontology collection is in dire need
 - Vert paleo collections in better shape but still needs work too!
 - Doing extensive collecting and accepting donations. Trying not to fall too far behind

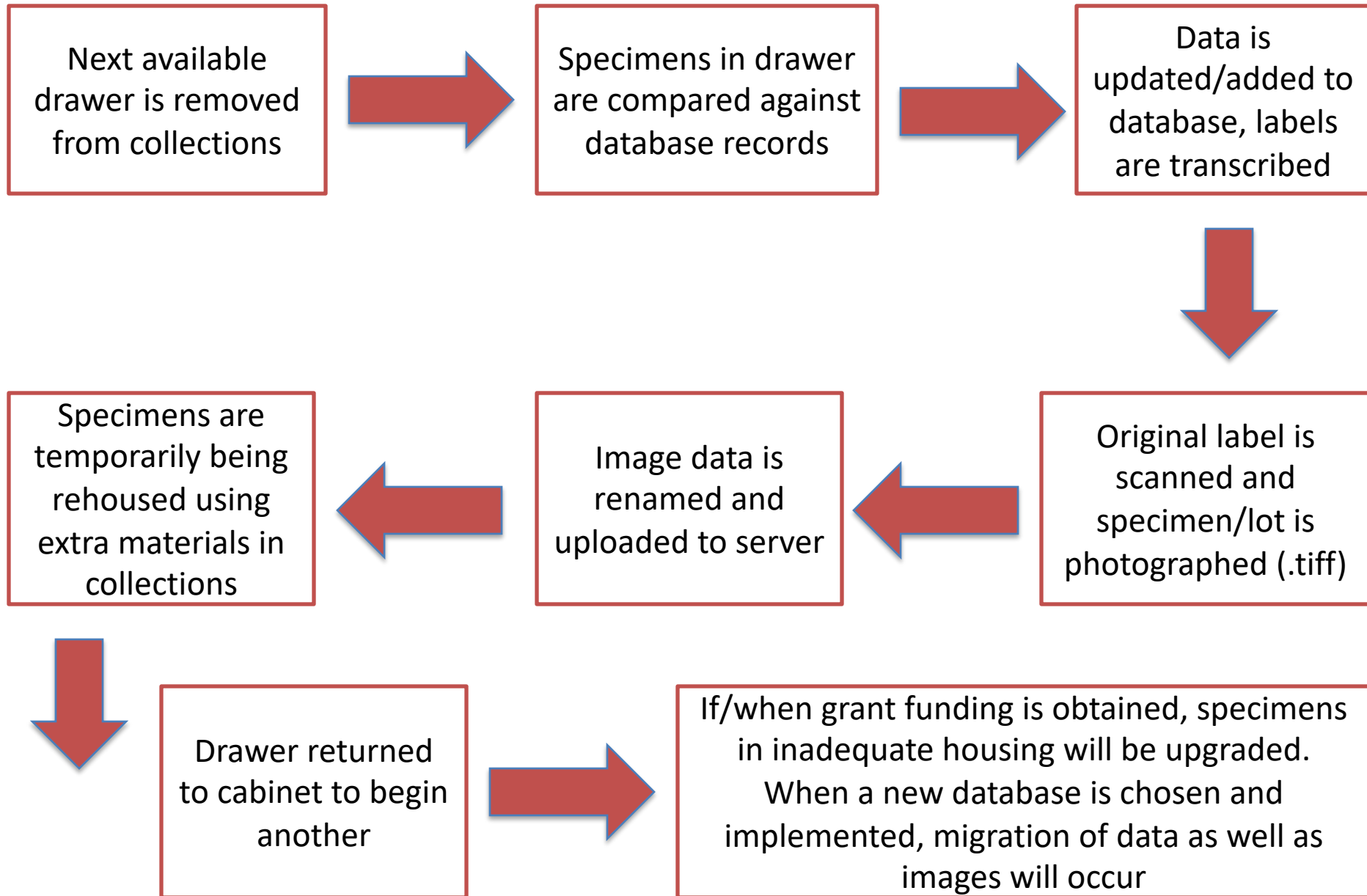


Placenticerus donation by G. Martin



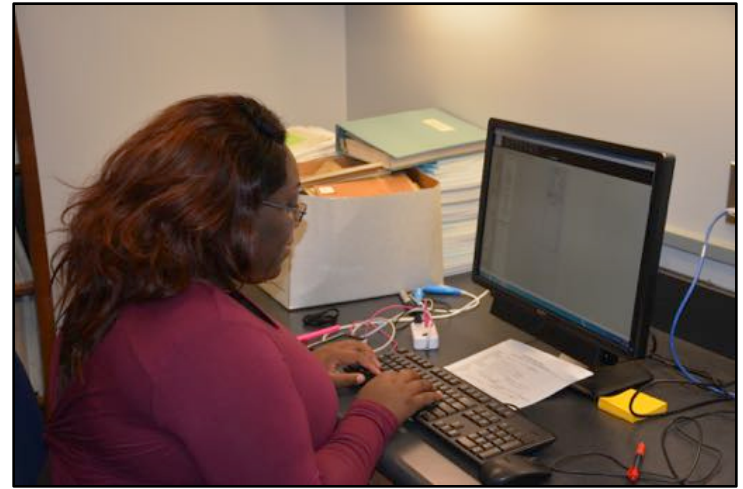
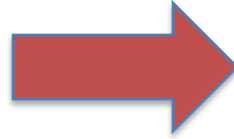
Collecting elasmosaur verts on Expedition

Work Flow





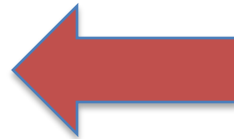
Typical invert paleo drawer



LaBethany pulls database files



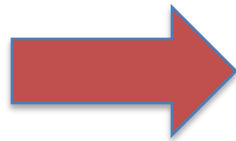
Anna rehousing specimens



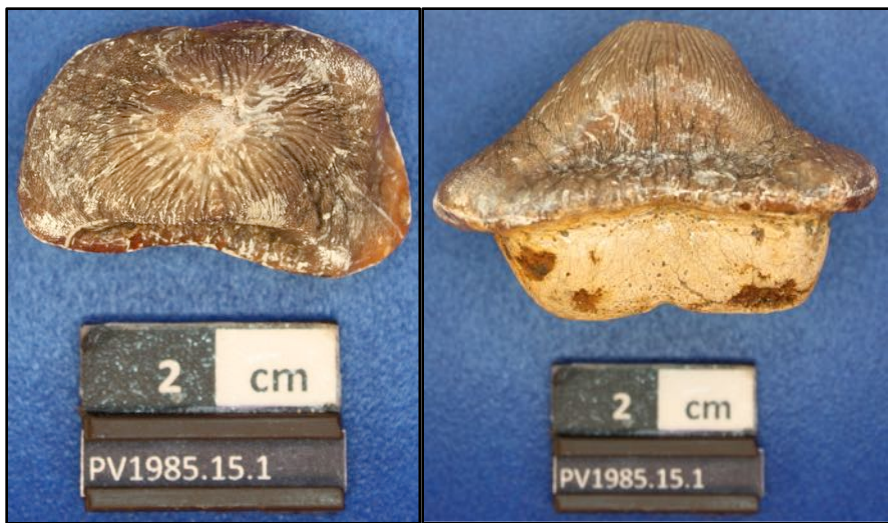
Anna displaying some original boxes



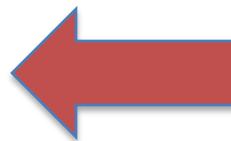
Rehoused and identified rudistid clams



Bing doing what Bing does



Images of a *Ptychodus* specimen



Imaging (Stock Photo)

Surprises

- Type specimens
 - Recovered 'lost' holotypes of Pennsylvanian trackways
 - Other invertebrate and paleobotany 'types' likely in collections but ??
- Other ephemera
 - Sternberg letter
 - Misplaced artifacts

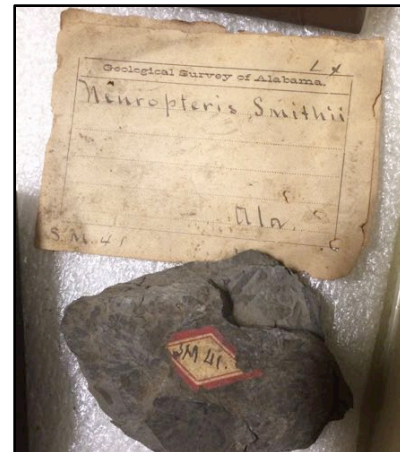
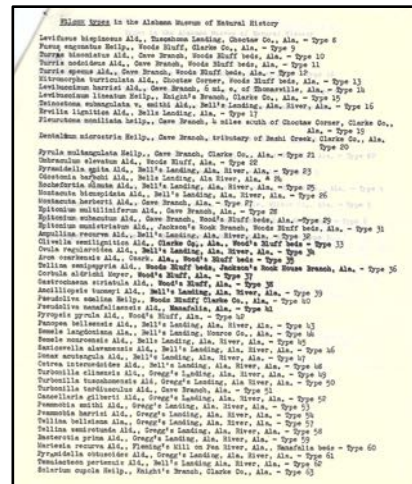
Re-Discovery of the Holotypes of the Carboniferous ichnospecies *Attenosaurus subulensis* (Aldrich and Jones) and *Cincosaurus cobbi* (Aldrich and Jones) with Comments on the Designation of Neotypes.

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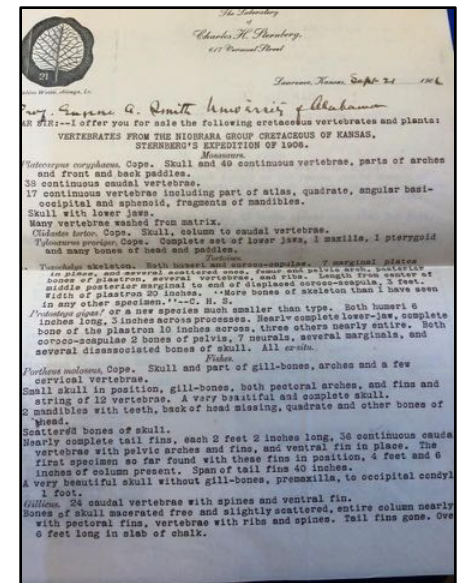
Keywords: Pennsylvanian; Alabama; Pottsville Formation; Ichnospecies; trackways

Abstract

The purpose of this application under Article 75.8 of the Code is to set aside the neotype for the ichnospecies *Attenosaurus subulensis* Aldrich and Jones, 1930. It was believed that the holotype for *Attenosaurus subulensis* was lost however recent curation at the Alabama Museum of Natural History has re-discovered the specimen. Furthermore, the re-discovery of the holotype of the ichnospecies *Cincosaurus cobbi* Aldrich and Jones, 1930 should also be recognized. It is proposed that the neotype of *Attenosaurus subulensis* be set aside with the discovery of the holotype.



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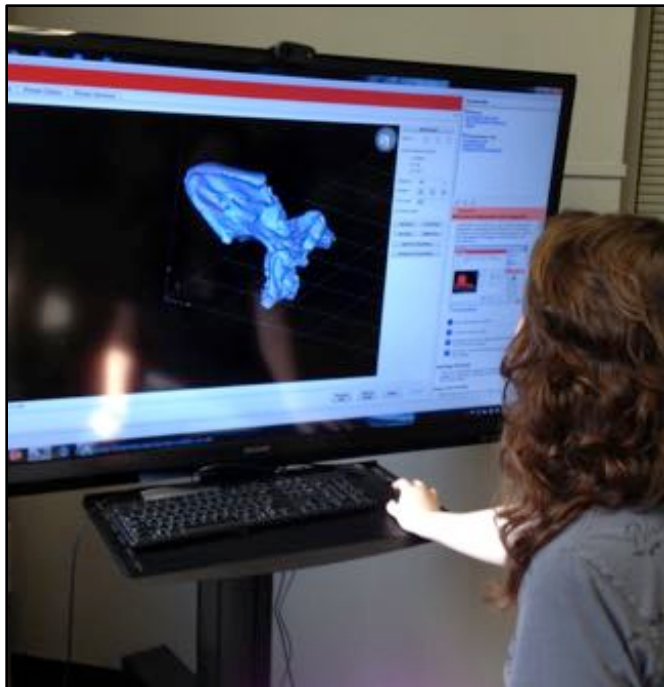


Fossils for sale by
C. Sternberg

Possible 'type' specimen

Other Digitization Efforts

- 3D scanning and printing specimens from the ALMNH collections
 - Collaborations with the College of Engineering and UA Libraries



Rendering of a *Ctenochelys* skull



UA student scanning the Sylacauga meteorite



Original (left) and 3D print (right) *Ptychodus polygyrus*

What's Next?

- Strategic Planning
 - Currently going through a MAJOR collections overhaul
 - Rewriting collections management policy
 - Moving away from individual accession numbers
 - Darwincore Standards
 - Eventual data migration
- How do we deal with licensing of CT/3D data?



Have I made
a huge
mistake???

Questions?



National Fossil Day

<http://djehret.wix.com/collections>



Darwin Day with Bing Blewitt

www.speakingevolution.org