Research and Other Uses of Images and Digitized Specimen Data

Mary E. Thompson, Ph.D.
Idaho Museum of Natural History/ISU
Scientific Illustrations

A.  
B.  
C.  
D.  
E.  
F.  

10 cm

BRACHIOPODA

Genetic Illustrations

Figure 1: Apertures
Doctoral Research
Pacing in fossil camels
Horse Trot
Horse Pace
Camel Pace
Paleopathology - ENS
Methods

Radiographs

CT Scans
A. *Equus occidentalis*  
La Brea Tar Pits  
B. *Equus scotti*  
American Falls  
C. *Equus simplicidens*  
Hagerman  
D. *Equus conversidens*  
San Josecito Cave  
E. *Equus caballus*  
modern horse
Preliminary Photogrammetric Data
Manually Calibrate The Pixel Size

1) Click on the beginning of an object of known length visible in the image.

2) Drag to the end of the scale. Release the mouse.

TIP: Draw along as much of the scale as possible. The longer the line, the more precise the measurement.

A colored line is drawn on the image. If the line does not match the scale, either redraw the line or fine tune the start and stop positions of the line with the small arrows next to the x and y positions of the line end points, which are located below the image.

3) When satisfied with the fit of the line to the scale, enter the length of the scale used in the labeled white box below.

4) Enter two letters that represent the unit of the scale being used in the labeled white box below. For example, type "in" for inches and "cm" for centimeters.

5) Click 'Done' when finished. To re-run the calibration method click 'Calibrate Length' in the File menu.

To cancel, close this window by right-clicking the 'close' icon in the upper left corner.

When zoomed in, pan around the image by right-clicking and dragging the image. Because of the text fields, the keyboard cannot be used to zoom and pan the image.
Spatial tools measure the color and size of features in digital images.

Select Version of Image to View and Analyze
- Original
- Enhanced
- Masked

Line Tool

Select a spatial analysis tool above.
- RGB
- HSV

Select color of tool

Pixel Position Adjust
- X: 25, Y: 74
- X: 552, Y: 75

Number of Pixels: 527
- Length: 13.27 cm
- Color Intensity [%]
  - Red (%): 86.67
  - Green (%): 65.88
  - Blue (%): 56.86
- Average Color: 69.8

Intensities of colors range from 0%, meaning none of the color is present, to 100%, when maximum color is present.

PIC 12 Lamine prox phal post reduced.jpg is 600 by 312 pixels

Zoom out Magnification: 100% Zoom in
Landmark Analysis