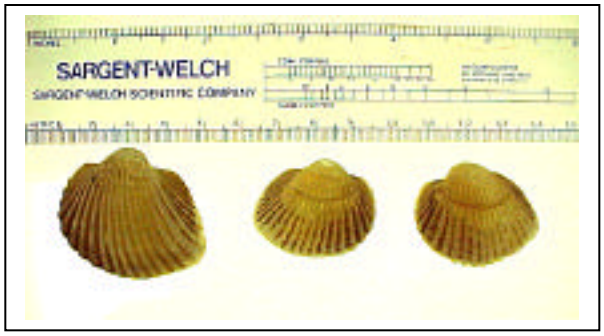
JPEG Images

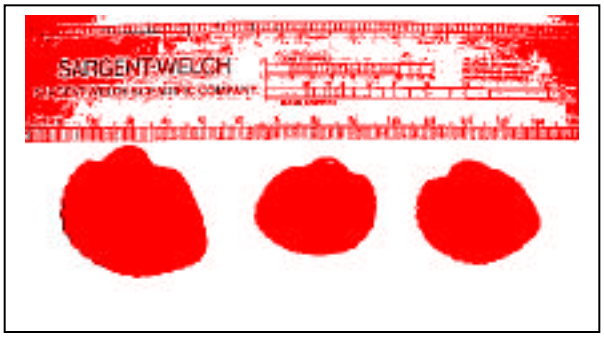
JPEG images are images that have been size compressed so they will take up as little space as possible. This is important if you want the image to "load" as quickly as possible on a WEB page or you want to store as many as possible on a floppy disk. The letters JPEG refer to the suffix that is put on the compressed file. For example a compressed image is actually stored as Image.jpeg or Image.jpg. If you double-click on a .jpeg image it will invariably open up on a Window's graphic program or under QuickTime's Picture Viewer on the Macintosh.



The image shown above is a JPEG image taken with a digital camera. It shows three different shells with a ruler in the background. If you wanted to do an analysis of this colored image comparing the relative area of the different shells you could open the image under NIH Image for the Macintosh or Scion Image for the PC. http://www.cipe.com/Software/Soft.html When you open this image you would get a grayscale image rather than a colorscale one. This would be fine because color is not important in this particular analysis. http://science.exeter.edu/jekstrom/default.html You could then calibrate the image using the ruler immediately above the shells. (If all your are interested in is a proportional comparison then you do not have to calibrate and can simply obtain the different areas in pixels.

Once you have a grayscale image you can double-click on what is called the LUT tool ª and set the rectangle selection tool ¤ around the particular shell you are interested in . Then select Measure **ü - 1** under Analysis followed by Show Results **ü - 2** under Analysis.

The dark color shown in the image below would be red under NIH or Scion. It is red because you have selected that particular range of image densities making-up the shell.



If you want to work with a colored image then you will need to convert the compressed image into an uncompressed 256 color file. This might be a .TIFF or .BMP format under Windows or a .TIFF or .PICT format for the Macintosh. There are Windows image converter shareware that can be found at http://www.zdnet.com/pcmag/ . A Macintosh shareware applications known as Graphic Converter can be downloaded at http://www6.zdnet.com/cgi-bin/texis/swlib/hotfiles/search.html?b=mac .