## Some Miscellaneous Things to Know about Resizing Photos

- Photos are measured in either Pixels or Inches (or Centimeters)
- Horizontal and Vertical Size is related to resolution
- Resolution describes how many pixels a monitor can display or how fine the printer can print
- Examples:
- A 4 inch by 6 inch photo at a resolution of 72 pixels per inch will display on a computer as 288 pixels $(4 \times 72)$ by 432 pixels ( $6 \times 72$ ). On a small monitor of 1920 pixels $X 1080$ Pixels With "zoom" set to $100 \%$, the photo would be approximately $10 \%$ of the horizontal screen (1920/288) and $40 \%$ of the vertical screen (1080/480).

- A 4 inch by 6 inch photo at a resolution of 72 pixels per inch would print on a printer capable of 300 pixels or dots per inch as 4 inches by 6 inches but 1200 pixels are required for the horizontal and 1800 pixels are required for vertical. The
photo would be very, very poor quality since the printer would have guess to make up the approximately 1000 missing pixels for horizontal and 1400 pixels for vertical.
- Reducing resolution is good (throwing away pixels), increasing resolution is bad (making up or guessing about pixels).
- When resizing, always consider the target, screen or paper.
- Rule of Thumb:
- For screen or digital use resolution of 70 to 100 pixels per inch (PPI). Anything more works but the screen is incapable of displaying the pixels and the image will be enlarged to use all the pixels and the file size is unnecessarily large.
- For paper or printing use resolution of 200 to 300 pixels per inch. Anything smaller will produce low quality images.
- For Photo Club:

For show \& tell, always resize to 1000 ppi on long side at (72-100 ppi resolution).

- Why:
- We are showing it on the screen and we want it to occupy most of the screen without zooming
- We don't need the extra pixels and the file size for transmitting is greatly reduced.
- Hint: If using Apple mail to send images, always select "Actual Size" after attaching image. If you select any other option, Apple mail will reduce the image size in order to reduce email and attachment size.

For printing for exhibits, resize to $11 \times 14$ inches, at 300 dpi

- Why:
- Printing on a press always uses the highest resolution available in the file.
- Anything less could be really poor quality.


## Resizing Tools and How to accomplish:

Recommended methods because they allow for setting resolution --

Lightroom. Demonstrated by Gene

Photoshop: Demonstrated by Karen

## Preview (on Mac)



## GIMP - Free available for Windows or Mac



## Methods to Resize but not to scale or change Resolution:

## Paint (Windows):



## Pixir - Free (Cloud based via browser i.e. Chrome, Safari, Explorer)



Simple and Quick Image Resizer - Free Web site

Go to Http://www.Simpleimageresizer.com

## in fly

Aesize without losing quality!

Simple Image Resizer

Define the new size of your image using:
© percentage (\%) dimensions
make image $50 \%$ smaller

