

File Types - JPG or TIF?

TIF (TIFF): File is saved with ALL color pixel information

JPG (JPEG): File “compresses” color information, pixels that are similar in color are replaced with same information.

Use a TIFF file for archiving and offset printing. The files are much larger in terms of memory storage than a JPEG. They don't work well for emailing, and generally aren't accepted for digital entries.

Use a JPEG file for emailing, for entry files, and for digital related stuff - like desktop wallpaper. JPEGs will work just fine for printing at home on your color ink-jet, if you make your own “cards” or small sized printouts.

File Size

The memory size, or how much storage room is taken by an image is determined by two factors, image size (numbers of pixels) and amount of compression. Image size is the total amount of pixels in an image. For the example at top right, this image is 4200 x 3269 pixels, and saved as a TIFF file for archiving (SEE top Image Size Box). Another way to describe the resolution is to give the image size in inches, 14” x 10.89” with a resolution, or number of pixels per inch, in this case 300 DPI. (OK - even though called pixels per inch, the standard abbreviation is DPI - or Dots-per-inch. Don't think too hard about it...)

This image, saved as a TIFF with no compression, is 40,231 KB or 40 MB. This is pretty large. The same exact size image, resaved as a JPEG is shown in the middle right image. This file uses compression, and when you save a JPEG it gives you options for compression level. The higher number has a higher quality file, and takes more memory. (I always use a 10). Very low quality numbers allow you to greatly reduce file size, and is a technique often used on the web. This image's memory size is reduced to 5 MB. The same number of pixels, but compressed, reduced the file size by a factor of 8!

The lowest cow image at right has been resized to meet 2009 Western Fed requirements - as shown in the image size box at lower left. This has been set to 1200 pixels in the longest direction (maximum), and is set for 300 dpi resolution. It results in an image that is 4” x 3.1” inches. The memory size has been reduced to 625K. Each of the cow images are shown at 100% size, which means the lowest one shows more image in the crop box, as it is physically smaller. The other images would need 10x14 space to show the entire image.

The pitfall of JPEGs, and why they aren't used for archival or printing, is some very highly compressed files have “ghosts” where the color compression compromises the image. (see lowest right image, borrowed from the AZ Daily Star). This image clearly shows some areas around the figures where the compression creates these ghosts. REMEMBER - archive with TIFF - all of the info, and downsize for convenience (where info is lost!)

