

Resizing a Batch of Pictures

By Kevin Fay

Introduction

For the SPS monthly exhibitions, we currently have a maximum file size of 1400 x 1050. Resizing images has always been one of the hurdles for new members to exhibit, especially if they have never resized images before. This article will give you an explanation of why we resize files, what these 1400 x 1050 numbers mean, and one great way to resize an entire batch of pictures in just a few steps.

Why we resize image files

There are two reasons we resize image files. The first is for ease of emailing. Suppose you had five pictures that you wanted to email. If they were full resolution .jpeg files at, say, 8MB each, your email attachments would be 40MB. The email would not get through the internet, since your email service (and ours) has limits far less than that. The second reason is that our high-definition projector can produce better and better images up to an image size of 1400 x 1050. For files larger than that, the image quality does not get any better. We would just have bulkier files to handle. So, it makes sense to stop at 1400 x 1050.

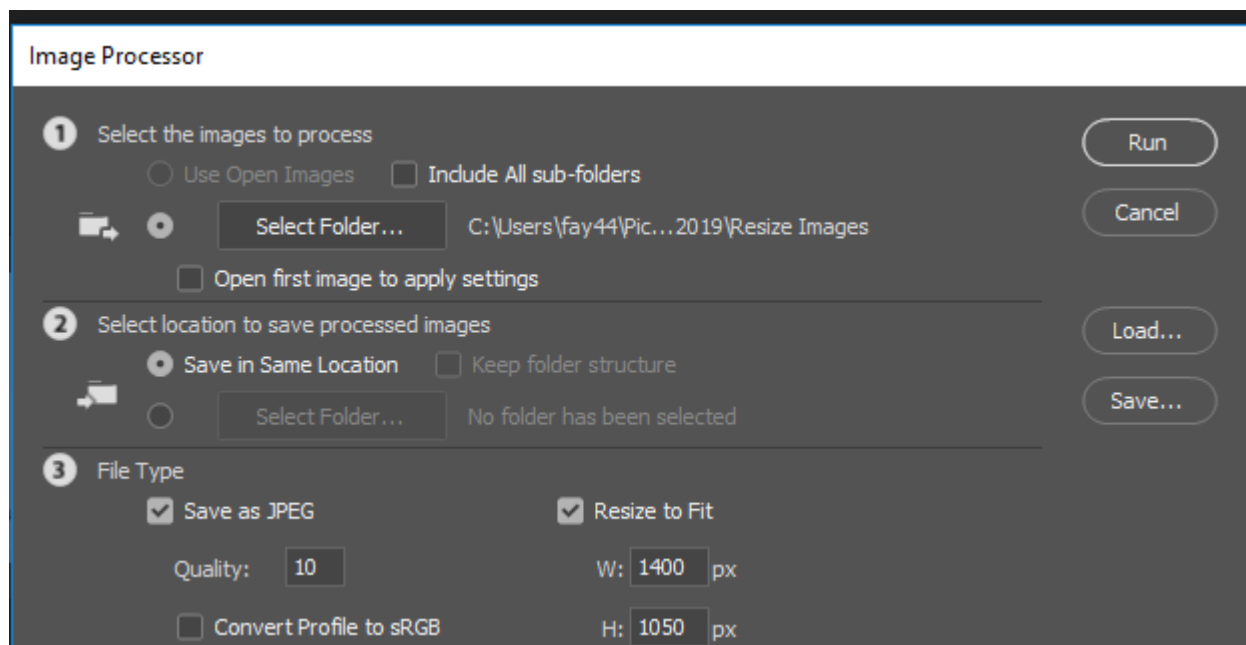
What 1400 x 1050 means

These numbers refer to the maximum width of an image file (1400 pixels) and the maximum height (1050 pixels). Suppose your camera produces .jpeg files of 6000 x 4000. The image resizing process compresses the file (removing pixels) until both dimensions are under the height and width limits.

Resizing a batch of pictures

Photoshop has an easy way to resize a whole batch of pictures in just three steps:

1. Open Photoshop
2. Then click File, Scripts, Image Processor
3. This window will open. Hit Run, and you are done.



if you have run the process before, this is all you do. If not, you need to do the following setup steps:

- Select Folder – Browse to a folder where you will have the pictures to resize. Click O.K. As you can see, my folder is called Resize Images. Whenever I want to resize pictures, I copy my files into this folder. That way, I never have to change this setting in the image Processor window,
- File Type and Quality – You want to check JPEG and pick a Quality. The max is 12. They say you are fine with an 8. I hedge and go with 10, so my files are a little bigger. Everything I have read says there will be no improvement in appearance by selecting more than 10. You would just have bulkier files.
- Resize to fit – Check this box, so your picture does not get distorted, and enter our width and height limits.

Unless you want to change controls for some reason, you only need to set these once at startup. Then you can resize batches of pictures as long as you want with just the first three steps under Resizing a batch of pictures.

Photoshop does not modify your original pictures. It creates a folder under your designated one, called JPEG, and makes compressed copies of each file in that folder. After you run this, go check out the two folders. You will see that the original pictures retain their dimensions and files size, but the copies in the JPEG folder have much smaller file sizes and dimensions that meet our 1400 x 1050 maximums.

This is all you need to know. If you are a normal well-adjusted person, **read no further!** But if you just have to know why your resized pictures are not exactly 1400 x 1050, read on. Suppose you have a 24MB camera. With the standard factory setting of 3:2, it can produce pictures that are 6000 x 4000:

Image shape



	Full Res	Maximum	%	Use	Resized
Width	6000	1400	23.3%	23.3%	1400
Height	4000	1050	26.3%	23.3%	933

Image Shape 3:2 4:3



	Full Res	Maximum	%	Use	Resized
Width	4000	1400	35.0%	17.5%	700
Height	6000	1050	17.5%	17.5%	1050

Suppose you held the camera normally, as in the top rectangle. The width needs to be reduced to 23.3% of its original size to get to 1400. The height needs to be reduced to 26.3% of its original size to get to 1050. To keep your picture from getting distorted, Photoshop will reduce both dimensions by the smaller %; that is 23.3%. So, the width is equal to its max, and the height is smaller than its max.

Now suppose you held the camera upright, as in the bottom rectangle. Again, resizing will reduce both dimensions by the same % to keep your picture from distortion. It reduces them both to the smaller %; in this case, 17.5%. This time the height is equal to its max, and the width is smaller.

In summary ... your camera, set at 3:2, produces pictures that are a different shaped rectangle than the 4:3 aspect ratio of a 1400 x 1050 rectangle. The only image that will ever resize down to exactly 1400 x 1050 is one that starts in that shape (i.e. taken with the camera adjusted to 4:3 or one you cropped to that shape).