

Camera Club of Hendersonville

Image Preparation

For the best presentation, images submitted for digital projection need to be prepared and resized properly. The club displays images with a high quality projector so the final image needs to be no more than 1400 pixels wide **and** no more than 1050 pixels high. **It is recommended to read, and re-read if necessary, all of this document to fully understand the process.**

There are many photo editing applications you can use to resize images. As they tend to be the most popular, three Adobe programs will be covered: Lightroom, Bridge and Photoshop, the full version, CS* or CC. These work essentially the same on both Windows and Macintosh computers. For Windows, a free option, FastStone Image Viewer, will also be described as an alternative to the commercial applications.

The trick to resizing images is to see if the photo you're working with is horizontal (landscape) or vertical (portrait). You want a result that is no more than 1400 pixels horizontally and, at the same time, no more than 1050 pixels vertically. The actual dimensions for your image may only fit one of the two numbers, with the other dimension being smaller. That's okay! In fact, with vertical images, the width will always be much less than 1400 because it has to be less than 1050 for the image to be a vertical. Vertical images have sizes like 700w x 1050h or 788w x 1050h. This is expected and correct for the image to look its best on the projector.

Besides resizing, two other operations can make a substantial difference in the quality of an image – sharpening and JPEG compression. A full discussion of sharpening is beyond the scope here, but it is an important consideration. When saving the final JPEG file for submission, use very high quality settings for minimal compression. File size is generally not a concern with images sized at 1400 x 1050 so high image quality can take precedence over small files.

Note that the keystrokes are Windows oriented. For a Macintosh computer, substitute *Option* for *Alt* and *Command* for *Control*.

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Resizing in Lightroom

In Lightroom, resizing is part of the Export process, and more than one image can be processed at the same time. After optimizing all of the images in the Develop module, switch to the Grid view in the Library module and follow these steps:

1. Select all of the images to be processed.
2. Click the *Export* button (*Ctrl+Shift+E*) in the lower-right.
3. Fill in the *Export Location* and *File Naming* sections as desired.
4. In the *File Settings* section, select JPEG as the *Image Format*, set the *Quality* to between 80 - 100, and select sRGB for the *Color Space*.

5. This is the key step.

In the *Image Sizing* section check the *Resize to Fit* check box and select *Width & Height* to automatically size the image properly in both dimensions at the same time. Set the *Width* to 1400, the *Height* to 1050 and the *Resolution* to 96 pixels-per-inch. The *Don't Enlarge* check box can also be checked if there's a possibility of images smaller than 1400x1050 being selected that should not be increased in size.

6. In the *Output Sharpening* section check the check box, set *Sharpen For* to *Screen* and set the *Amount* to *Standard* which is generally right for projection. If additional sharpening is needed, select *High* instead.



Before exporting, save the settings as a preset for future use!

7. Ignore the remaining sections and click the *Export* button. The selected images will be processed and saved to the location specified in the *File Naming* section and can, after being renamed appropriately, be submitted directly.

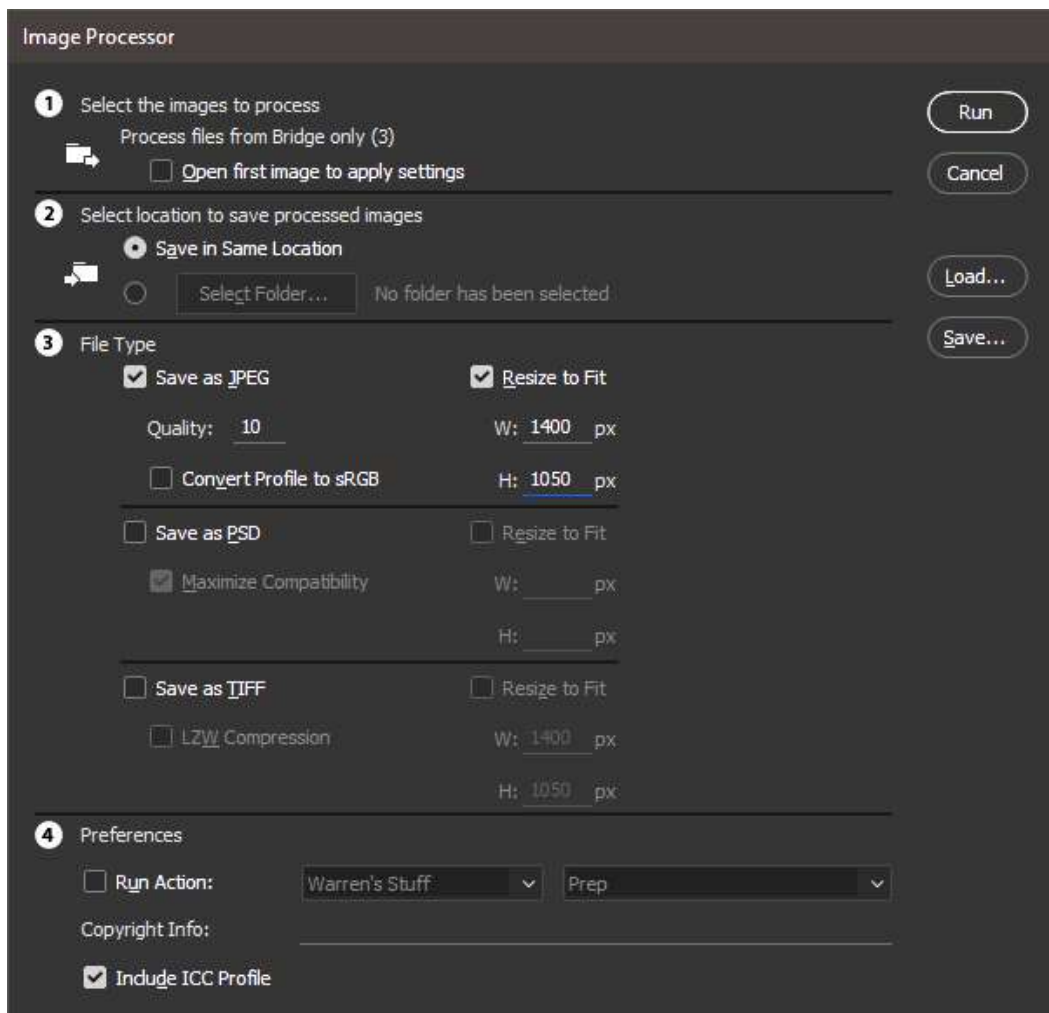
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Resizing in Bridge

Bridge is the image file organization utility that comes with the Creative Suite, including Photoshop. It includes a batch processing tool that makes resizing multiple images very easy. The best way to use this method is to optimize the image completely and save the image in the TIF or PSD format, including sharpening, to avoid recompressing each time the image is saved, and then to process these files to create the JPEGs. The following uses Bridge CC, but the steps are the same for other versions.

1. Start Bridge, and select all of the images to be processed.
2. Click *Tools* → *Photoshop* → *Image Processor...* on the menu to bring up the image processor dialog.



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3. Select the *Save in Same Location* option. This will result in the JPEG image files being placed in a new folder named "JPEG" immediately below the original image folder, making them easy to locate.

4. This is the key step.

Check the *Save as JPEG* check box. Set the *Quality* to between 10 - 12. Check the *Resize to Fit* check box and enter 1400 in the *W* space and 1050 in the *H* space. This will result in the image being sized so that both values are used for the proper dimensions. If the original image does not have a color profile or the profile is for a color space other than sRGB, check the *Convert Profile to sRGB* check box. (If you're not sure what that means, it's safe to check it.)

5. Clear the PSD and TIFF options.
6. Check the *Save ICC Profile* check box.
7. Click the *Run* button. The selected images will be processed and saved to the JPEG sub-folder and can, after being renamed appropriately, be submitted directly.

Note - this method does not provide an option for setting the resolution (pixels-per-inch) of the JPEG file. The club guidelines do not specify a resolution as this is not, strictly speaking, necessary. The resolution is only used when printing and has no effect when viewing on a computer display or with a projector. If setting the resolution is desired, the easiest way to accomplish this is to use a Photoshop action and run it by checking the *Run Action* option in the *Preferences* section, however, creating the action is beyond the scope of these guidelines.

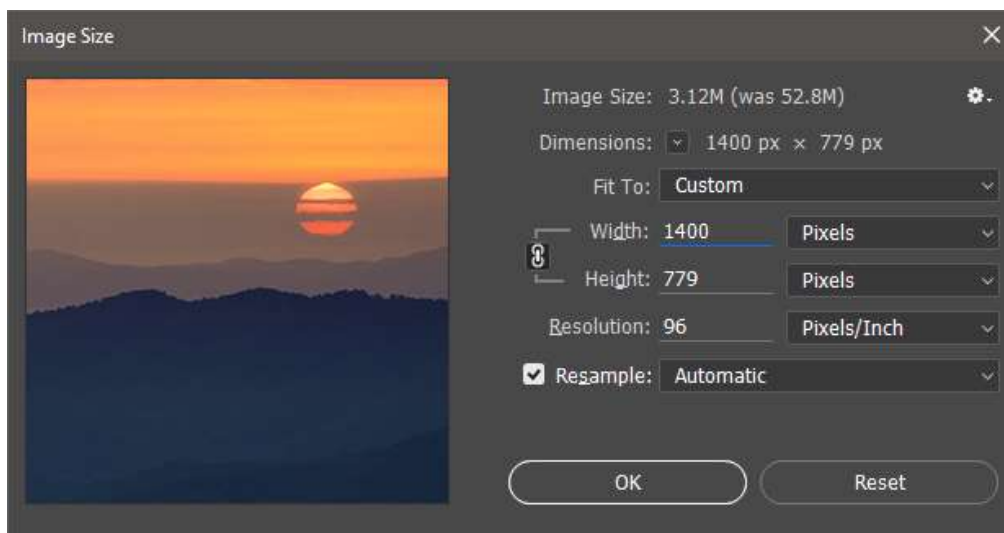
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Resizing in Photoshop CS* or CC

With Photoshop CS* or CC, start at the bottom of the resizing dialogue, and work up to the top. Here's what the resizing dialog looks like and the steps to follow with Photoshop CC but others are similar:

1. Load the original image to be resized into Photoshop.
2. Click *Image* → *Image Size...* on the menu (*Alt+Ctrl+I*) to bring up the resizing dialogue.



3. At the bottom of the dialogue, make sure *Resample Image* is checked, *Automatic* is selected, and *Constrain Proportions* is checked. In the center of the dialog, make sure the aspect ratio is locked – the small lock icon will have two lines extending toward *Width* and *Height*.
4. Make sure the *Resolution* type is *Pixels/Inch*, and enter 96 in the *Resolution* box.

5. **This is the key step.**

If the image is a horizontal (landscape), enter 1400 in the *Width* box. If the *Height* box shows 1050 or less, you're done with this step. If the height is greater than 1050, enter 1050 in the *Height* box, accept whatever shows in the *Width* box, and you're done with this step.

If the image is a vertical (portrait), enter 1050 in the *Height* box. The width will be less than 1400 (in fact, less than 1050) because the image is a vertical so accept whatever shows in the *Width* box, and you're done with this step.

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This will produce an image with a width that is 1400 or less **and** a height that is 1050 or less.

6. Click *OK* to resize the image.

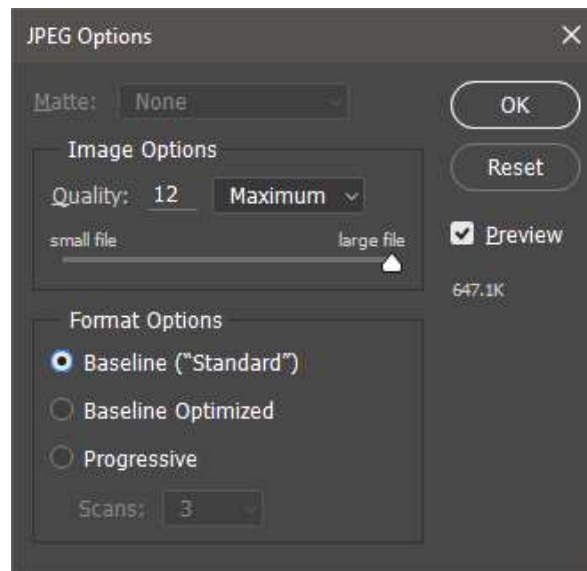
Sharpening

There are many ways to sharpen an image, but *Smart Sharpen* is one of the easiest. Once the image has been resized, sharpen so it looks crisp on the monitor, being careful to avoid halos and color shifts.

Saving as JPEG

This step is only needed when saving directly from Photoshop. With Lightroom or Bridge it is part of the batch process.

1. Click *File* → *Save As...* on the menu.
2. Enter the file name, select JPEG for the *Save as type:* format, and click *Save*.
3. The JPEG Options dialogue appears.



Enter a number in the range of 10 - 12 in the *Quality* box for a high image. Click *OK*.

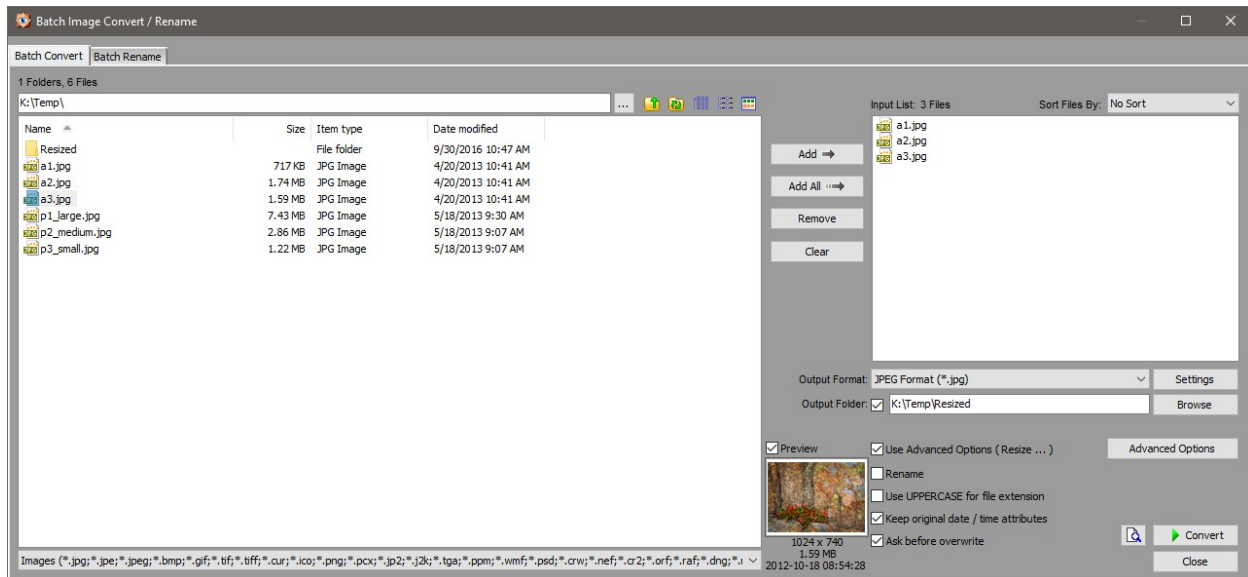
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Resizing in FastStone Image Viewer

FastStone Image Viewer is a free photo management and editing program for Microsoft Windows™ available at www.faststone.org. Along with resizing images, it is a very capable image editor as well. And, there's a scaled down version that only handles resizing, the FastStone Photo Resizer. The process described here uses the Viewer, however, the Resizer operation is identical except for the image selection.

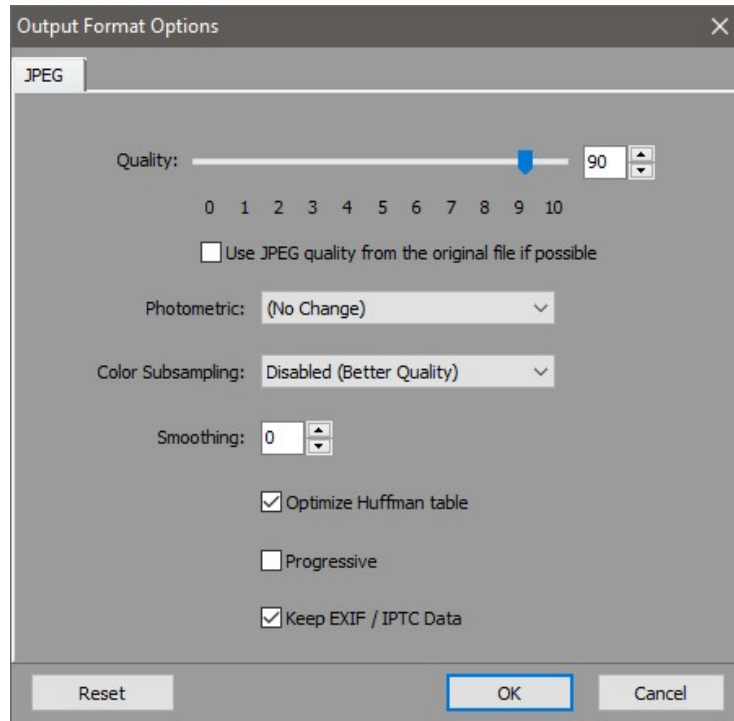
1. Start FastStone Image Viewer, and select all of the images to be processed.
2. Click *Tools* → *Batch Convert Selected Images* on the menu or press the *F3* key to bring up the resizing dialogue with the selected files shown in the *Input List* on the right.



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3. Select JPEG as the *Output Format* and click the *Settings* button to bring up the output format options dialog.

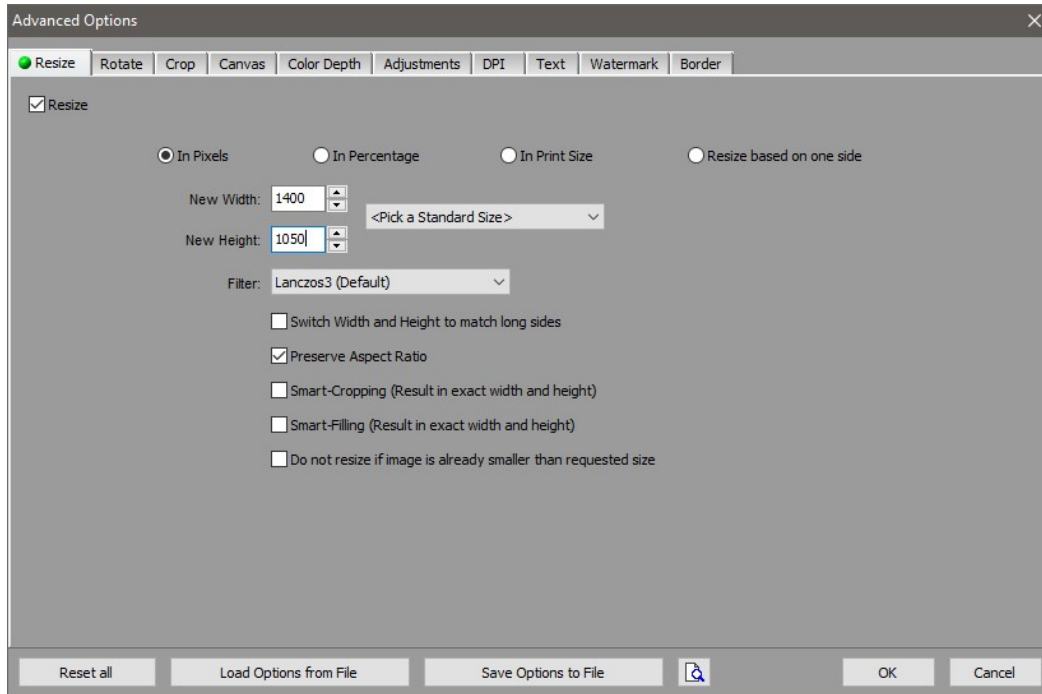



4. Set the *Quality* to between 8-10 (displays 80-100), and set *Color Subsampling* to *Disabled (Better Quality)*. Leave *Smoothing* at 0 and click *OK*.
5. Back in the batch convert dialogue, make sure the *Output Folder* checkbox is checked, and browse to the folder to store the resized images.
6. Click the *Advanced Options* checkbox, then click the *Advanced Options* button that is displayed.

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- Click the Resize checkbox to display the resizing options.



-  **This is the key step.**

Make sure *Pixels* is selected and *Preserve Aspect Ratio* is checked. Set the *New Width* to 1400, the *New Height* to 1050. In the *Filter* box, leave the default Lanczos3 setting or chooses Lanczos2 for a possibly sharper image. (It might be good to experiment with both to see which you prefer.) The *Do not resize if image is already smaller than requested size* checkbox can also be checked if there's a possibility of images smaller than 1400x1050 being selected that should not be increased in size.

- Click *OK* to close the advanced options.
- Back in the batch convert dialogue, click *Convert* to resize the images. When the process is complete, click *Done* in the *Image Convert* results dialogue. The images in the specified output folder can, after being renamed appropriately, be submitted directly.