Northern Exposure
Photographers Group Inc.

PHOTO TUTORIAL
RESIZING IMAGES
Paul Sauter, February 2020

This tutorial shows how to resize images that you want to submit to the Projected Images category in the NEPG monthly competitions (or any other competition).

The current NEPG competition rules (2019), state that:

"Digital files submitted for the projected images section must be in JPEG file format, must not exceed a width of 1920 pixels and a height of 1080 pixels, and must be in the sRGB profile."

All cameras, and even my old smart phone, produce images that are too large (too many pixels) to project properly on the screen. So images have to be resized.

Examples are given below on how to resize images using Adobe Lightroom and Photoshop, as well as Microsoft Windows 10 Photos and Mac Preview. There are many other programmes that can achieve the same.

Don't get your email programme to resize an image automatically, this usually results in very small file sizes and significant loss of quality. So resize first as below, save it to a good spot on your computer, write your email, and then attach the image to the email, and send.

Note that resizing is one of the last things you need to do before you can submit an image to the competition, after you've done all the editing. Don't use these settings when you just want to crop an image as part of your editing. And always make sure that you keep the original image in the original size/resolution!
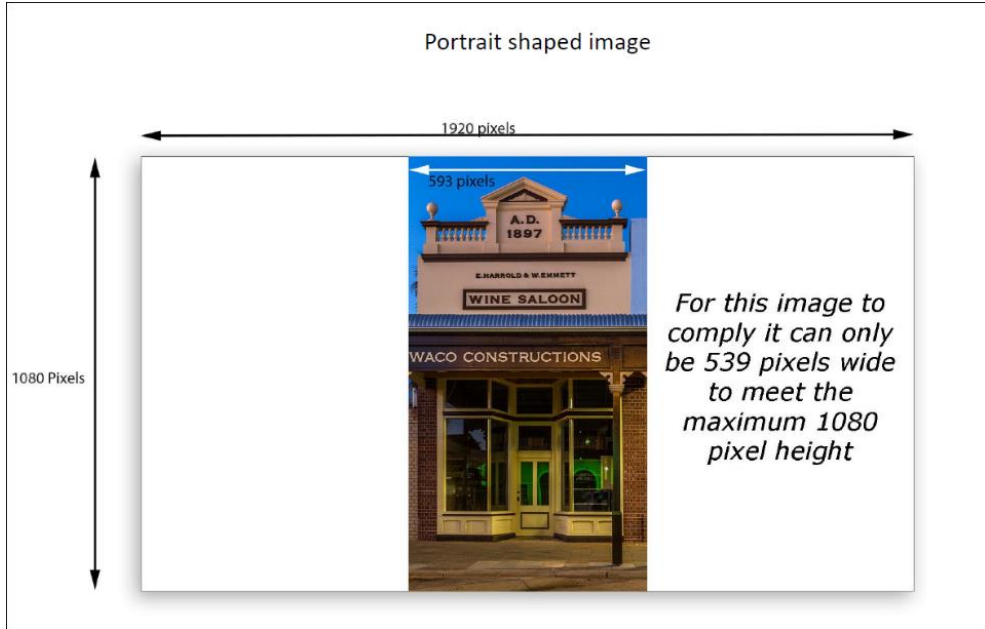

A bit of theory:

"*Image Size*" is related to the number of pixels. Generally, the more pixels, the clearer the image is ("better resolution");

The pixels/inch resolution is irrelevant for screens and projectors (but not for printing!). The resolution, image size and total number of pixels are interrelated.
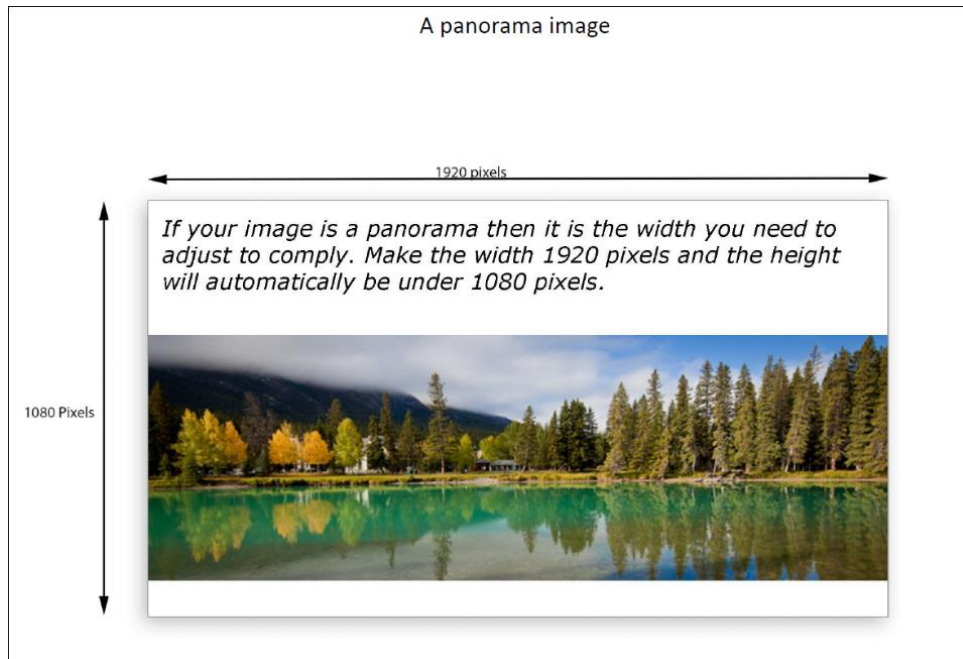
JPEG "*Quality*" refers to the compression: A higher level of compression (where JPEG omits information) results in lower image quality, and a smaller file size. Use "*Maximum*" quality wherever the image size allows.
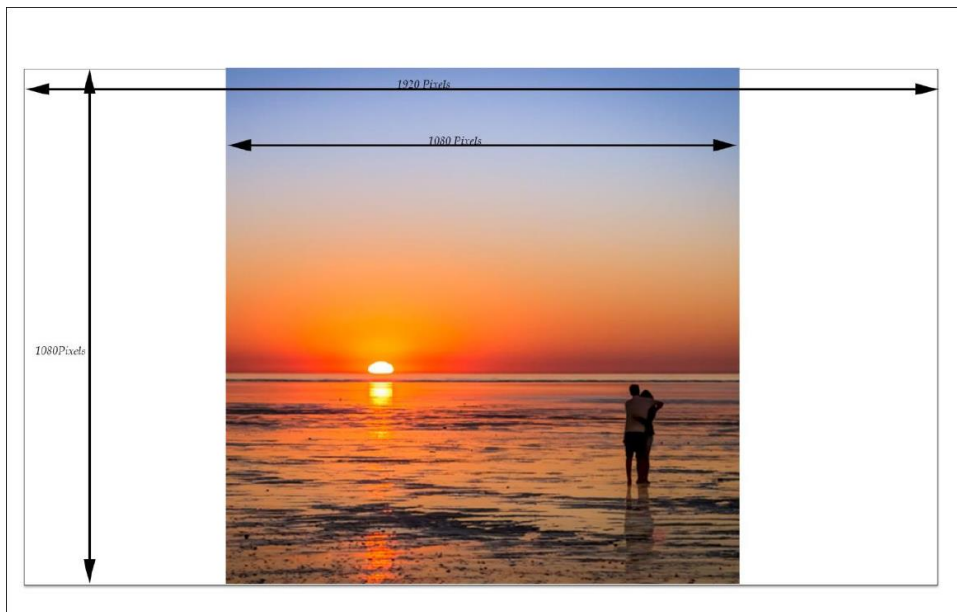

A few examples (with thanks to Ric McDonald WAPF):

- For a portrait image, and most landscape images, the height is the important setting: set to 1080 px and the system will calculate the width (remember, this is after you've done your cropping and editing!);

- Only for a wide, panoramic landscape image, you'll have to set the width first to 1920, and the system will calculate the height.

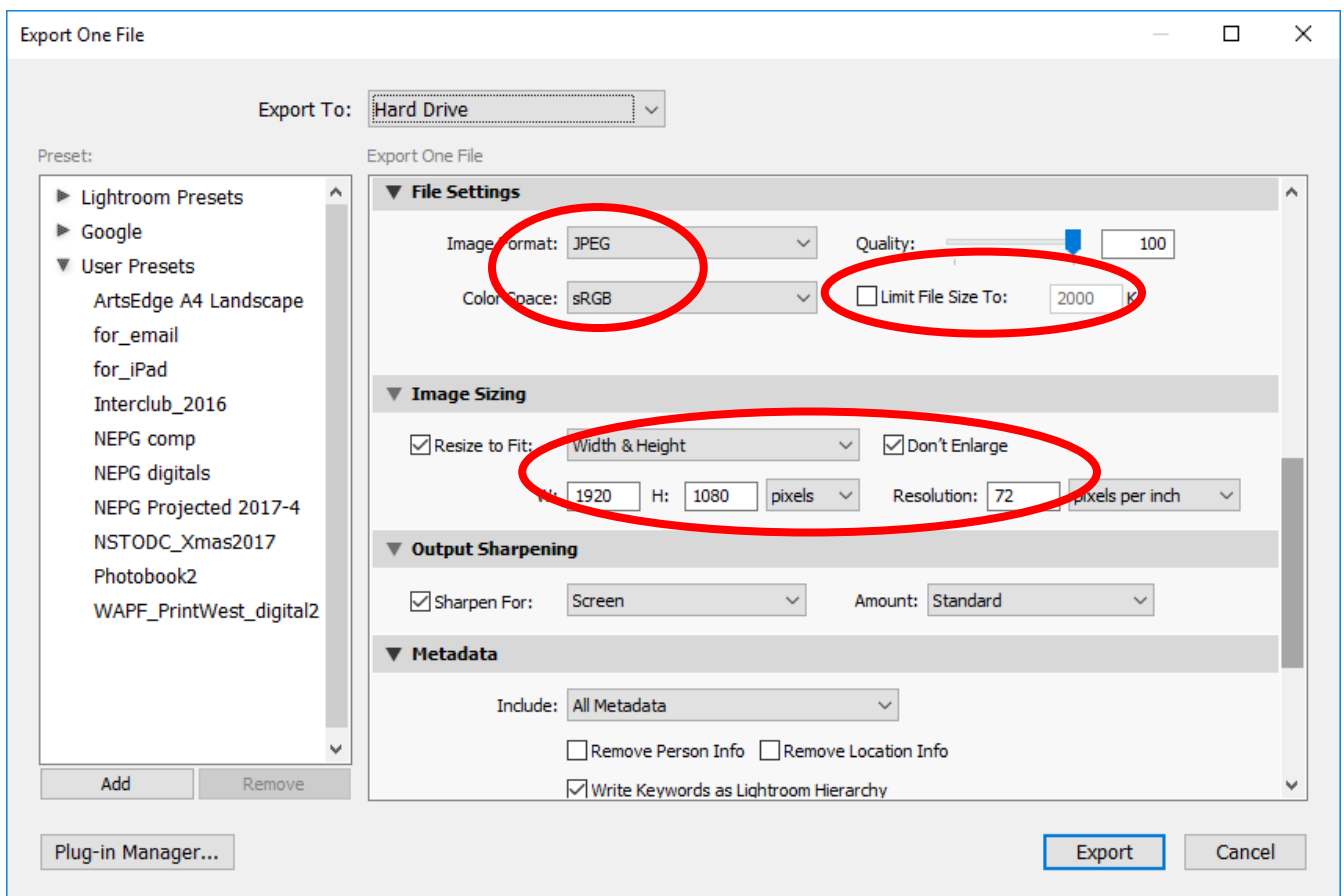- For a square image, height and width are equal, set at 1080px.

- Using Lightroom, and a setting "Width & Height" at 1920 and 1080 pixels, it automatically selects the correct maximum Width or Height (see next page), and calculates the other one. In other systems, you may have to manually set one, and check the other.
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ADOBE LIGHTROOM CLASSIC

See also Dean's tutorial on the NEPG website, under Members>Tips and Tricks>Lightroom: "Resizing in Lightroom for Projected Images".

- Go to File>Export;
- Set all these parameters on the one page;
  - Resolution is irrelevant, but in some comps they ask for it;
- Add it as a preset;
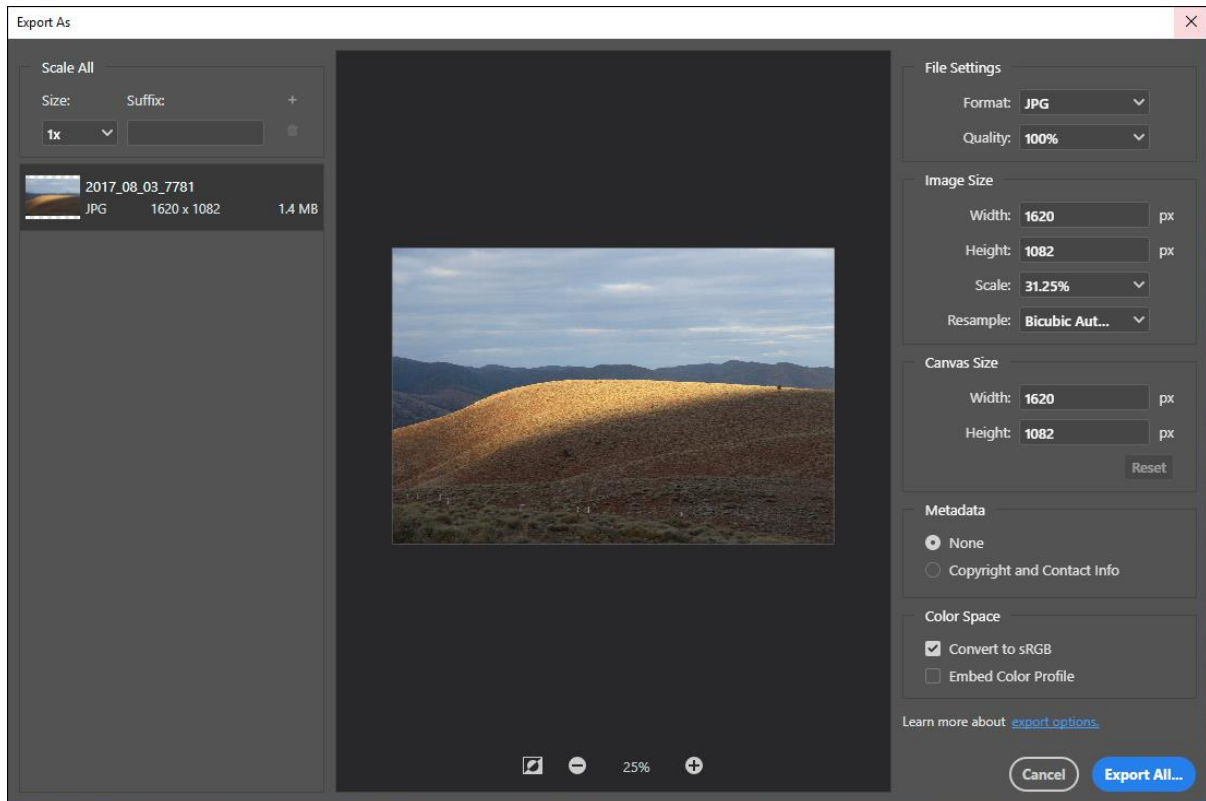- And use that preset every time you export a competition image out of LR.

- Remember, these settings are for Projection only. If you want to print, different settings are required!

ADOBE PHOTOSHOP CC (AND ELEMENTS)

See also how to download and use an Action on the NEPG website, under Members>Tips and Tricks>Photoshop> Resizing in Photoshop for Projected Images

METHOD 1

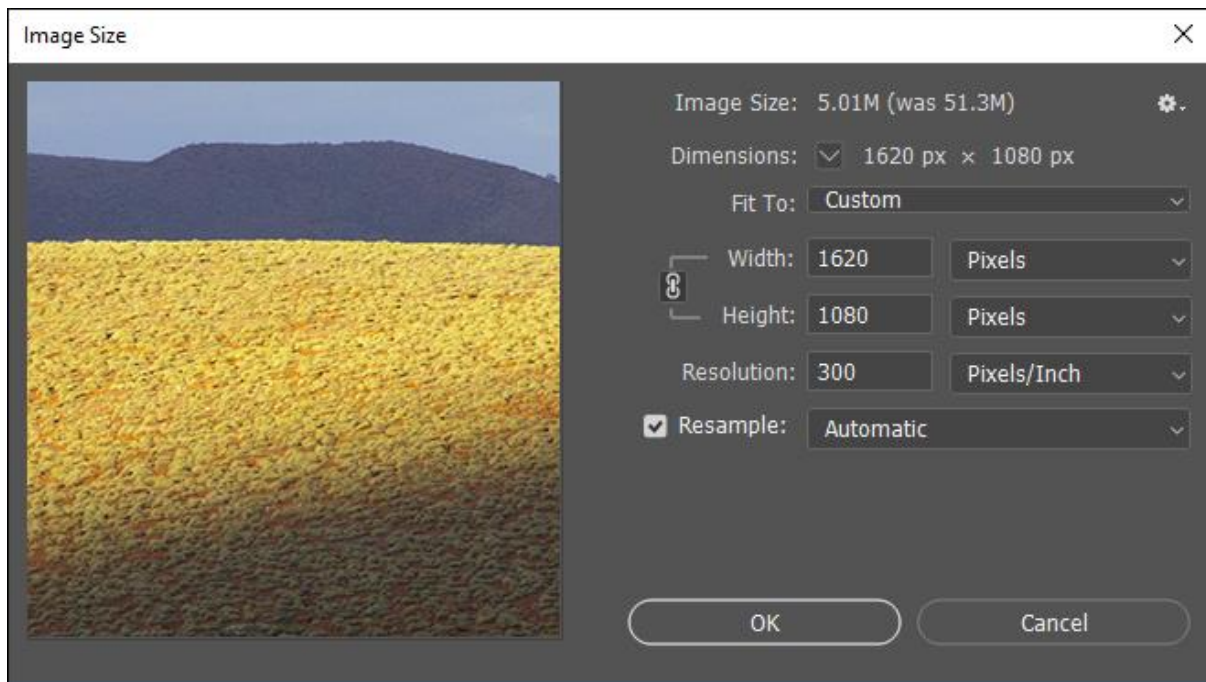- File>Export>Export As….

- Set Format to JPG, Quality to 100%
- Set Image Size Height to 1080, and check Width; if Width is greater than 1920, set the Width to 1920;
- Tick "Convert to sRGB";
- Export All….
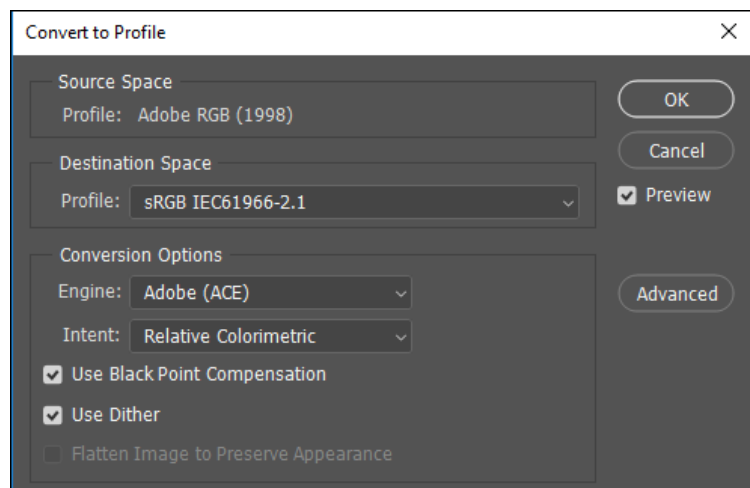- Select location as required and type in new file name;
- Save.

METHOD 2

- Save you edits first, e.g. as a PSD;
- Continue, or open the image (e.g. jpg, PSD etc) you want to resize;
  - In Photoshop: *Image>Image size;*
  - In Elements: *Image>Resize>Image Size*;
- Don't worry about the Resolution, not important for projection, unless the Competition specs demand a particular resolution. In that case, set that first;
- Make sure the *Resample Image* is ticked and set to "Automatic";
- Set Height to 1080, and check Width; if Width is greater than 1920, set the Width to 1920;
- *OK*;

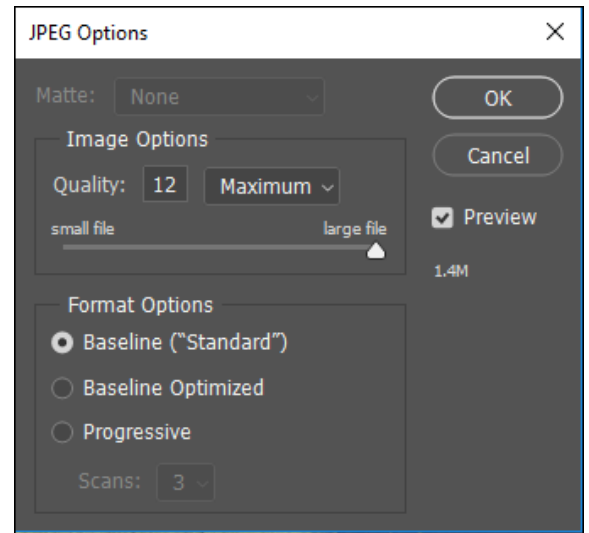- The small, resized image will appear on your screen;

Convert the COLOUR PROFILE
- **Edit>Convert to Profile**

- Select profile sRGB IEC61966-2.1
- Leave the rest;
- OK

- Rename the file by *File>Save As*, select a location, and give the file a new name, using the JPEG Format, then: *Save*;

- On the next menu (JPEG Options), move the slider to "*large file*", so that the Quality is *12* and *Maximum*, and check the size of the image on the right-hand side (tick Preview, or in Windows Explorer after finishing).

  For some competitions, the size has to be below a certain maximum. If the size is too large:
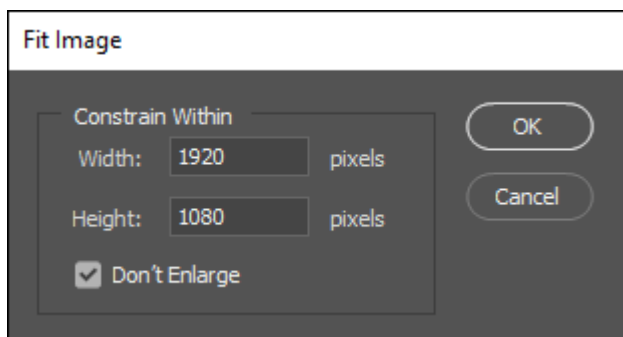
  o   move the Quality slider one or two steps to the left towards "small file" and reduce the Quality;
  .

JPEG Options

Matte: None

Image Options

Quality: 12   Maximum

small file   large file

1.4M

Format Options
● Baseline ("Standard")
○ Baseline Optimized
○ Progressive

Scans: 3

OK
Cancel
☑ Preview

- Press "OK", and this will create the new resized file.
- If you have used sharpening on your image, examine the resized image for any anomalies on screen at 100% magnification. Alternatively, do sharpening after you have completed the resizing.
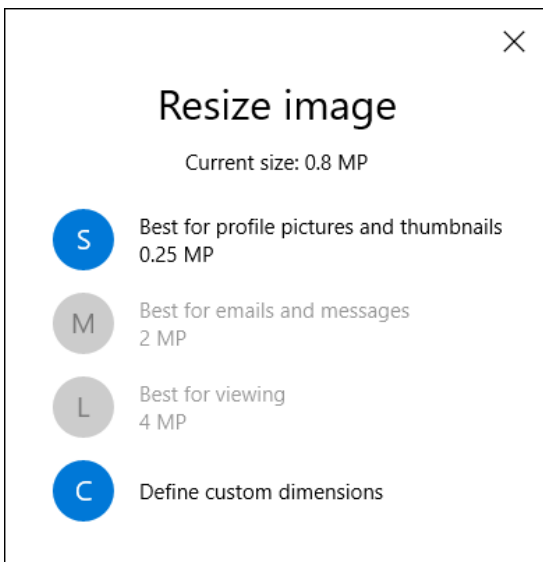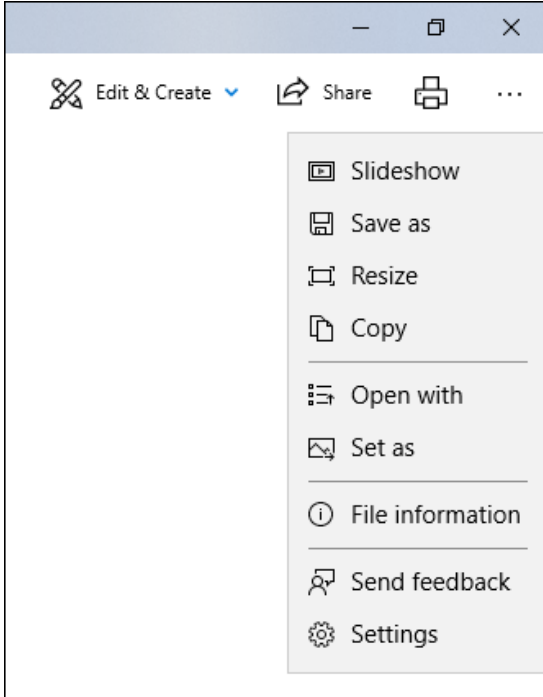
METHOD 3

- File>Automate>Fit Image

Fit Image

Constrain Within

Width: 1920   pixels

Height: 1080   pixels

☑ Don't Enlarge

OK
Cancel

- OK, the continue Convert to Profile as above;
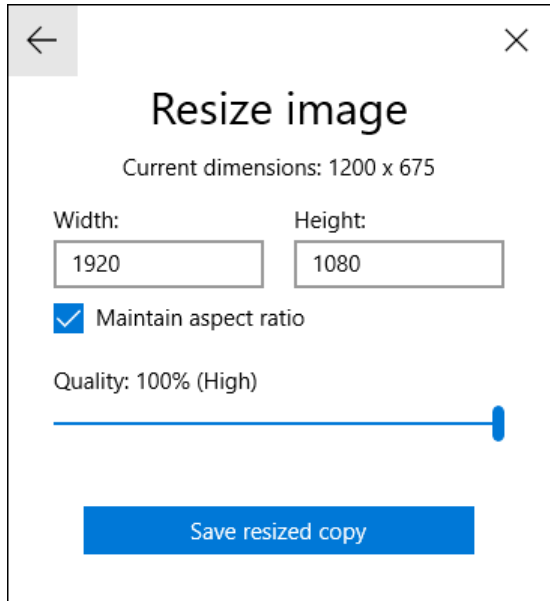
MICROSOFT WINDOWS 10 – PHOTOS

- Top-right: click on **…**
- Resize

- Define custom dimensions

- Type in 1080 at Height
- The Width should not be higher than 1920
- If higher than 1920, type in 1920 at Width first;
- Maintain aspect ratio;
- Set quality to 100%

- Save resized copy:
- Give it a new name (for the competition), in a new location (where you can easily find it back).

MAC - PREVIEW

(with thanks to Mike Hewitt)

The following is the easiest way to resize an image on a Mac without a separate image-editing program like Photoshop.

Using Preview:

Preview is a program that comes loaded on every Mac. It is used to preview images and is capable of some editing functions.

If you double click a jpeg image file or choose FILE-Open in Preview the image will be displayed in the preview window.

Choose 'TOOLS - Assign Profile' to change to sRGB and then 'TOOLS – Adjust Size' to change image size. In the resulting pop-up window ensure that the 'Scale proportionally' box is checked.

Next select pixels for the width and height before selecting 1080 for the height value. The width will be adjusted automatically and if less than 1920 pixels all is OK. If it is more than 1920 pixels then select 1920 for the width and the height will be auto selected to something less than 1080 pixels.

Do not save the image, as this will overwrite the original image file. Choose 'FILE – Export', name the file, ensure that jpeg is selected for the format and then export to say your desktop.

Choose 'EDIT – Undo' (or Cmd Z) and then again choose 'EDIT – Undo' (or Cmd Z) to undo the last two changes (assigning the profile and resizing).

> It is also possible that you may have cropped your image in Preview by making a selection (click and drag) and then using TOOLS – Crop. Naturally, this should have been done before assigning the profile and resizing of the image. You would then need to do another 'EDIT – Undo' (or Cmd Z) to revert to the original image.

Drag the exported jpeg file from your desktop into the email when you send your entry to the Competition Director. Ensure that 'Full size" is selected in the email before sending the file.