# **All About Image Resizing**

Images that are entered into Lancaster Photographic Society competitions are required to follow a standard for size and format, so that everyone's image is presented in the same way.

If you want to get the *absolute* best quality for your images, and you are confident in Photoshop or Lightroom or other software, you can easily create them to this standard yourself. Or if you prefer, you can leave the resizing and formatting to the software that we use to manage the competition.

## The Resizing Standard

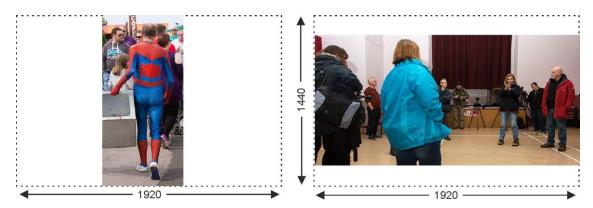
So let's look first at the resizing standard and see exactly how your images will look as they are sent for judging.

The standard sets out that, whether your image is in portrait format or landscape format, it needs to be set out in landscape format for the competition. The long horizontal edge must not exceed **1920 pixels**, and the short vertical edge must not exceed **1440 pixels**.

(The exact dimensions might change from one year to another, but you can see what is required from the Entry Preparer application).

The best way to think about this is to imagine that you have a frame that is **1920 pixels wide** and **1440 pixels high**, and you must fit your image into it. Unless your image is the exact frame size, you'll end up with empty space at top and bottom, or at left and right.

In the illustration here, on the left we have an image that is in portrait mode, and on the right one that's in landscape mode.



Both images have been adjusted to fit exactly into our imagined **1920 pixel by 1440 pixel** landscape format frame, which is represented by the dotted line.

### **Resizing in Your Own Application**

If you feel confident in Photoshop, or Lightroom, or whatever image processing application you use, it's best to do all the resizing in there before you enter your images into this application.

The reason for this is that to get the absolute best image quality, you need to process it in this order:

- 1. Do your adjustments
- 2. Resize the image to fit the imagined 1920 pixel x 1440 pixel frame
- 3. Sharpen the result as required

If you enter an over-sized image, the competition software will resize it; but now you can't do the sharpening step yourself. In practice, though, it's not worth being worried about it – the image quality will be very high whatever order you work in.

So let's work through the steps you follow to do the resizing.

Different applications do this in different ways. There's an example showing how it works in Photoshop CC below; but this is the *procedure* you should follow. Remember when you resize to make sure that your application maintains the *aspect ratio* of the image – otherwise, it will get squashed or stretched as you change things.

First, do a check that you're making the best of your image. If the **image height** is less than **1440 pixels** and the **image width** is less than **1920 pixels**, it's below the required size. If you have a larger version you'll do better going back to that rather than stretching this one.

But if resizing is needed, follow this procedure:

- First, try changing the image height to 1440 pixels. If the image width is now 1920 pixels or less, you're done.
- Otherwise, start the resizing process again from the beginning, and this time set the **image width** to **1920 pixels**. Double check that the **image height** is **1440 pixels or less**, and you're done.

Then you can do any sharpening that you want and save the final JPEG version of your image.

## **Resizing in the Competition Software**

If you'd rather not do those steps yourself you can leave the resizing to the competition software. As we've discussed above you'll get a very, very tiny loss of image quality, but in practice it's very unlikely to be noticeable.

For this, you produce your JPEG image at whatever size is convenient for you. There are some limits we have to apply to make sure we don't get overloaded (the Entry Preparer application will tell you if you try to exceed them):

- Your image file must not be more than 12 megabytes in size
- The longest side of your image must not contain more than 6000 pixels.

Then you can enter your image into the Entry Preparer application. You'll see a warning that your image will need to be resized, and you'll have a chance to change your mind.

(When you enter your images into the Entry Preparer application, the software will always take a copy of your *original unresized* image for sending to the Competition Secretary. The actual resizing work isn't done until the images are prepared by the Competition Secretary for sending to the judge – this way, we can incorporate any improvements we make to the image processing software without involving you).

There's one important thing to note: if your image is *smaller* than it needs be to fit that imagined **1920 pixel by 1440 pixel** frame, <u>it won't be made larger</u>. So here you really do need to do some work on the image yourself, or you won't be presenting your work to the judge in the best possible way. The Entry Preparer application will warn you about this.

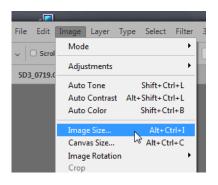
### **How to Resize with Photoshop CC**

If you have **Photoshop CC**, you can follow the steps here. **Lightroom** will work in a similar way, but the resizing dialog you see will look rather different.

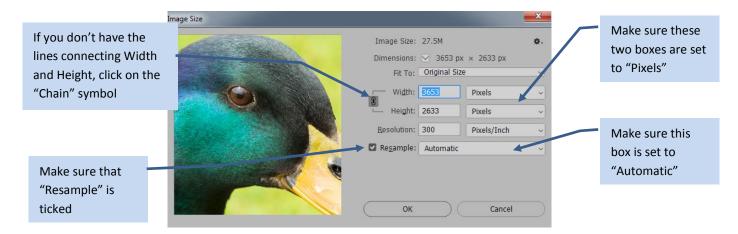
We'll start with a landscape format image.

First, get your image completed and cropped to the aspect ratio you want. It's best if you don't do any sharpening just yet.

Now click on the **Image** menu and select **Image Size**:



You'll see a dialog like this, which shows you how big the image is now and lets you make a wide choice of changes.



Make some checks that you have the right initial settings before doing anything else:

- Look at the "Chain" symbol to the left of the image dimensions. If you don't see grey lines connecting "Width" and "Height", click on the symbol. This setting locks the image aspect ratio, meaning that your changes won't make it look stretched or squashed.
- Make sure there's a tick beside "Resample". This tells Photoshop to change the number of pixels in the image to get to the size we want.
- Make sure the box to the right of this says "Automatic". This tells Photoshop to use the most appropriate technique when it processes the image.
- To the right of "Width" and "Height" make sure the two "units" boxes are set to "Pixels", so we can input what we want as a count of pixels.

And now you're ready to begin with the resizing proper. Change the number in the **Width** box to **1920**, and see how the value in the **Height** box changes in step with it.

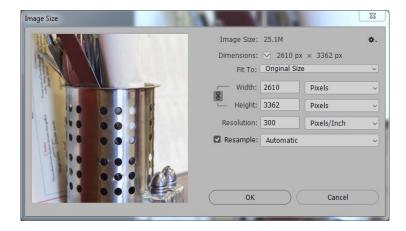
Now the dialog looks like this:



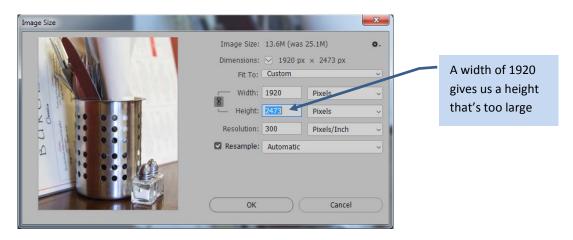
The height is now 1384, and as this is less than our maximum of 1440 we are done, and you can press OK.

Now you can do your image sharpening and save the JPEG to enter into the competition.

So what about a **portrait** mode image? Well, we start off in the same way as before:



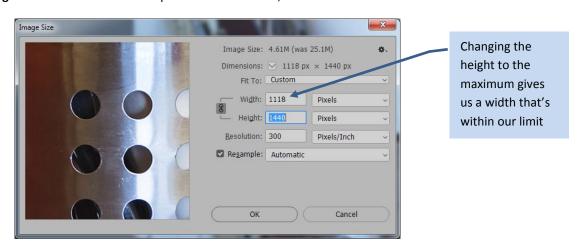
And we set the Width to 1920, like this:



But that's given us a Height of 2473, which is bigger than our maximum of 1440.

So we need to reset and do it differently, and we do this by holding the **Alt** key down and clicking on the **Reset** button which appears as you press the key. The **Height** and **Width** numbers go back to what they started at.

So now we change the Height to 1440 and let Photoshop work out the Width, like this:



Now we have a Width of 1118, which is inside our maximum of 1920, and we're done, and you can press OK.

Now you can do your image sharpening and save the JPEG to enter into the competition.