Preparing Images for Print

Most exhibitions, club and external, now expect photographers to upload a digital image for appraisal before submitting a finished print. There is always a statement of the size of images that should be uploaded: for example WCC expects images to fit within 1920 x 1080 pixels.

Uploaded images are made as part of a process that starts with a captured image, is followed by cropping to emphasise the subject matter, tonal range adjustment and sharpening and finally by resizing for upload.
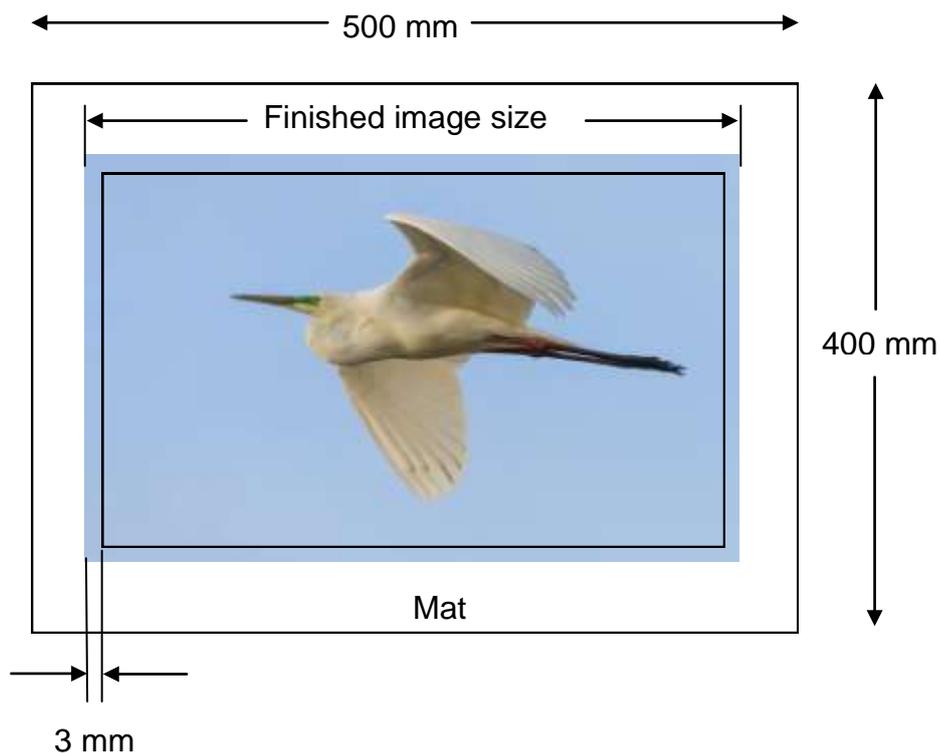
You can think of three stages:
1. The captured image (can be RAW or JPG)
2. The cropped and corrected image to best illustrate the subject
3. A resized image for upload in JPG format

For a printed image there is one more stage and that is the preparation of a high resolution image suitable for print. It is vital to know that the high res image for print MUST NOT be made from the uploaded JPG. What you have to do is make sure that the cropped and corrected image from stage 2 above is saved and used as the starting point for the print.

Working up the print

Here are the steps you must go through to make a printed image. We'll deal with HOW to do them in a later section.
1. Find out, from the rules, what the maximum size your finished, matted print can be (or must be).
2. Choose the size you would like for the borders of the mat. Remember that it is unlikely that you will be able to have the same size border all round the image, because it will depend on the aspect ratio of your cropped image. Using 1 and 2 calculate the viewable size of the longest side. Add 6mm for mat placement.
3. Find out the print resolution in dpi (dots per inch).
4. Using the chosen (or given) dpi, and the size you arrived at in Step 2, use your imaging program to resize the image to the finished size and resolution.

500 mm

Finished image size

400 mm

Mat

3 mm

Other factors to be considered
1. Block mounted or matted? Block mounting means an image on a backing but with no surrounding mat. Refer to the rules for the exhibition you are entering. For example, WCC rules permit block mounting, but WAPF Interclub does not.
2. Permitted finished sizes. Again refer to the rules for the exhibition you are entering. For example, the WAPF Interclub demands all images to be presented at a size of 500mm x 400mm, centred within a black mat. Permitted viewable image sizes are a maximum of 430mm x 330mm and a minimum of 150mm x 150mm. On the other hand, WCC requires visible images to be at least 400 sq cm and no larger than 50cm x 40 cm including any borders. This does NOT mean that all images have to be on a 50cm x 40 cm board. The largest square image is therefore 40cm x 40cm including border.
3. Is the finished work for exhibition at WCC or at a prestigious exhibition? This may affect your workflow. For club exhibitions, you may wish to re-use your mounts to minimise cost. This means that you will have a pre-defined cut-out (visible area). In this case your image cropping must take this in to account. Such images may not present your subject with its optimum crop. For prestigious exhibitions you will want the best possible crop which means a bespoke mat.

How to Prepare
Step 1. Choose the finished size of your image. If you are using a re-usable mat the finished size has already been chosen. You will already have cropped your image to suit it. You can now resize it as explained below.

Step 2. If you have cropped your image to its most aesthetically pleasing shape, your first step is to decide whether the width or the height will determine the finished size. You will need to take into account the overall size of the print, including the mat, and the size of the borders around the image.

The latter is very much an aesthetic judgement. For example a 500mm x 400mm print needs a margin of at least 50mm all round. This doesn't mean that the viewable is fixed at 400mm x 300mm because your preferred crop will usually dictate otherwise. If your crop indicates that all margins can't be equal, consider the best distribution of space. In the WAPF Interclub you don't get this choice because the rules state the image must be centred, but for other exhibitions it's often preferred that the lower margin should be the largest and that the other three margins should be the same.

Step 3. If you are using a third party printer, you will be told the required print resolution (ask for it if necessary).

If you are using your own printer, choose a resolution between 200 and 300dpi. Epson printers work well at 240 dpi. 200dpi is the minimum value you should use for a reasonable quality print. In general the higher the dpi the better. The choice of dpi is also influenced by the number of pixels in the image. If your image has a limited number of pixels, it may help to set the print resolution at 200 dpi. You will get an idea of this when you use the dialog boxes.

How to resize your image in Photoshop
1. Open and crop your image as required.
2. Use **Image/Image Size** and make sure that the **Resample** box is **unticked**.
3. Change the Resolution to the required value . You will see that the Width and Height change to reflect the new value of resolution.
4. Examine the values in mm for the Width and Height. The values shown may be too big, about right, or too small for your desired finished image size. If the sizes shown are too large or about right, there is no problem. If the sizes shown are less than half the required

finished size you have a problem. There are too few pixels to make a finished image of the size you want. You can try altering the Resolution down to 200 dpi, but if the sizes are still less than half the required image size, the image may not be worth printing.

5. Next, **tick** the Resample box and enter the required **Width** or **Height** appropriate to your finished image size. Remember to include the 6mm necessary for mat placement.
6. Click **OK** to resize your image. It is now ready to print.

How to resize your image in Lightroom for a third party printer
You will have to create a file for the third party printer. You do this through the Export dialog box.
1. Open and crop your image as required.
2. In the Library or Develop module, choose **File/Export**.
3. Choose where to send the exported image and rename it as desired.
4. Under File Settings, choose the JPEG image format, set the Quality to 100, set the ColorSpace to sRGB, and untick the Limit File Size box.
5. Under Image Sizing, tick Resize to Fit and choose Long Edge or Short Edge (whichever will be determining the size), and enter the required size. Remember to add the 0.6cm for mat placement. Untick Don't Enlarge. Set the Resolution as desired.
6. Click on Export.
7. WARNING. Lightroom gives no warning or indication as to whether the resulting image has enough pixels to make a satisfactory upscaled image. You will have to look at the starting image and calculate from its pixel dimensions what the unscaled image size would be. If the finished image size is less than twice the size (linear dimensions), then it will upscale satisfactorily. For example, if you had a starting image of 3123 x 2361 pixels to be printed at 300 dpi, this is equivalent to 3123/300 = 10.4 inches by 2361/300 = 7.9 inches (26.7 cm x 20.1 cm). This would easily upscale to fit within 50cm x 40cm.

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