SIZING PROJECTED DIGITAL IMAGES FOR COMPETITIONS AND COMPLETION OF FILE PROPERTIES FOR INTERNAL COMPETITION ENTRIES

Updated August 2023

MAXIMUM DIMENSIONS – LANDSCAPE FORMAT

These are the maximum dimensions. If the image size is below these dimensions a canvas can be added to bring the image to the maximum dimensions. The use of a canvas is optional.

Colour space sRGB

Max File Size 3MB.

CANVAS ADDED TO LANDSCAPE FORMAT

A black canvas added to bring the image to the maximum dimensions.

Colour space sRGB

Max File Size 3MB.

840 PIXELS WIDE

1200 PIXELS HIGH - MAX

MAXIMUM DIMENSIONS – PORTRAIT FORMAT

These are the maximum dimensions. If the image size is below these dimensions a canvas can be added to bring the image to the maximum dimensions. The use of a canvas is optional.

Colour space sRGB

Max File Size 3MB.

CANVAS 1600 PIXELS WIDE

1200 PIXELS HIGH - MAX

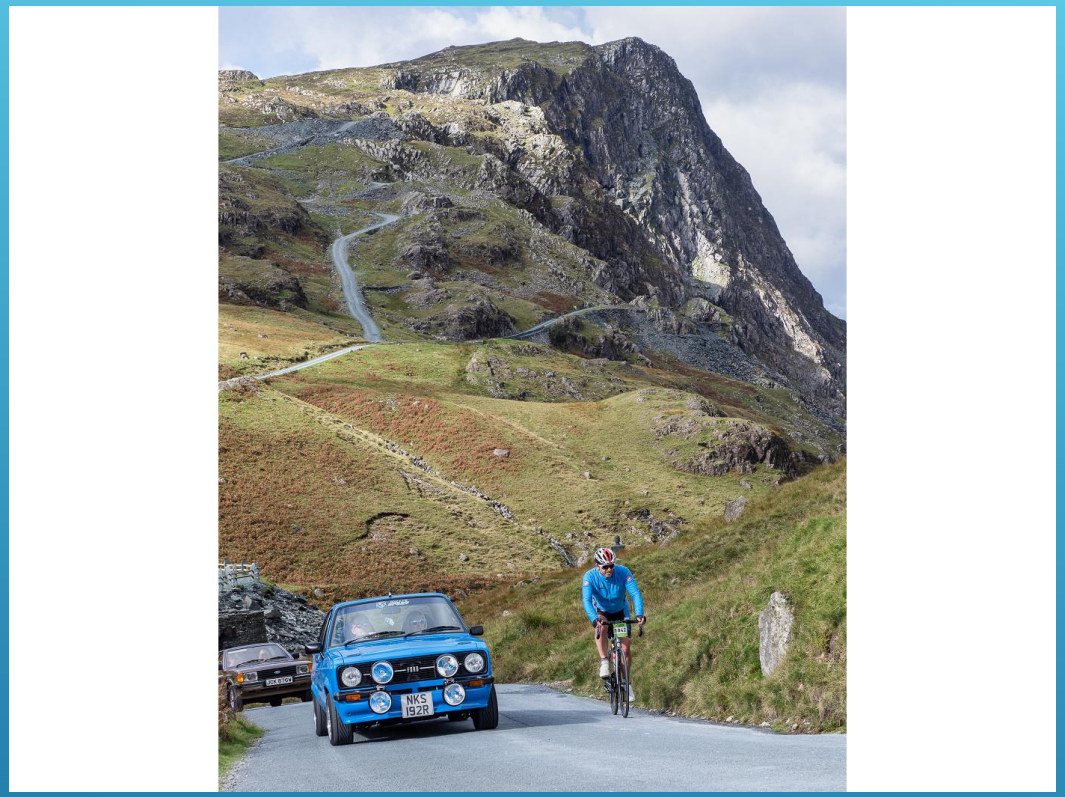


IMAGE 840 PIXELS WIDE

CANVAS ADDED TO PORTRAIT FORMAT

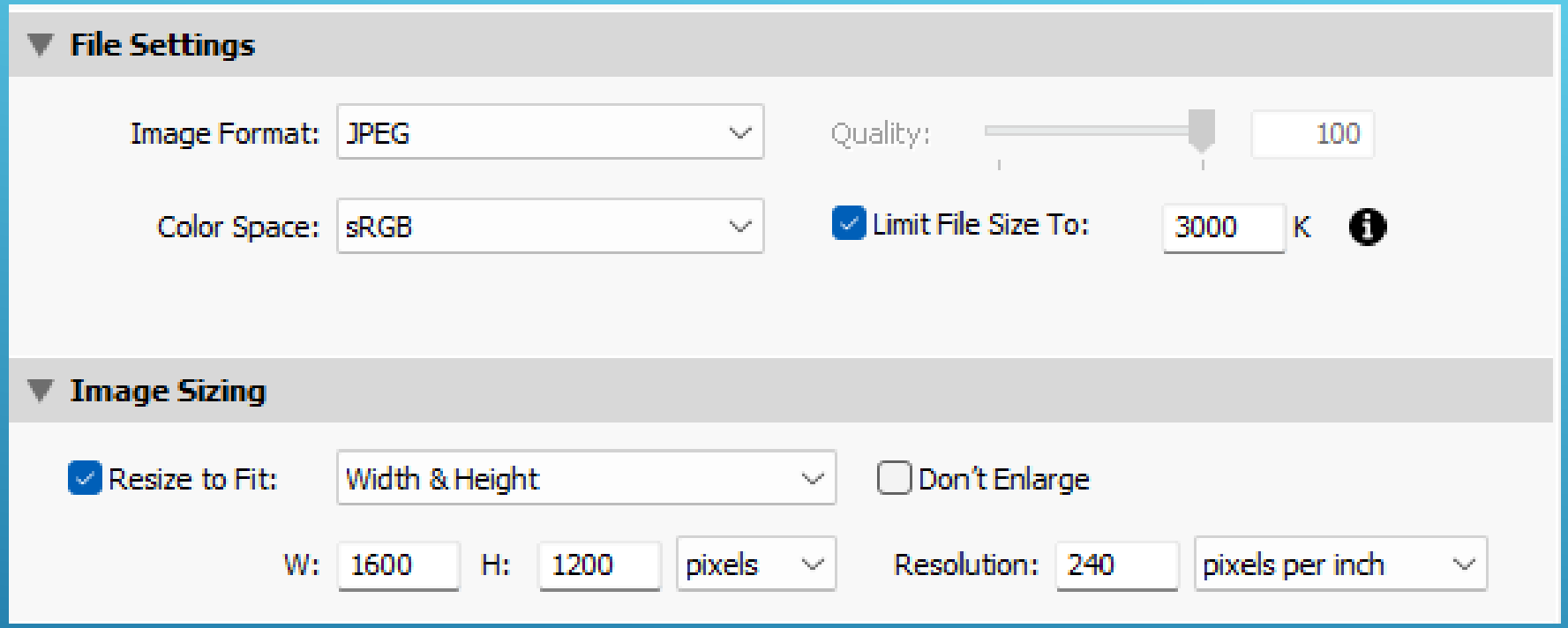
A canvas added to bring the image to the maximum dimensions.

Colour space sRGB

Max File Size 3MB.

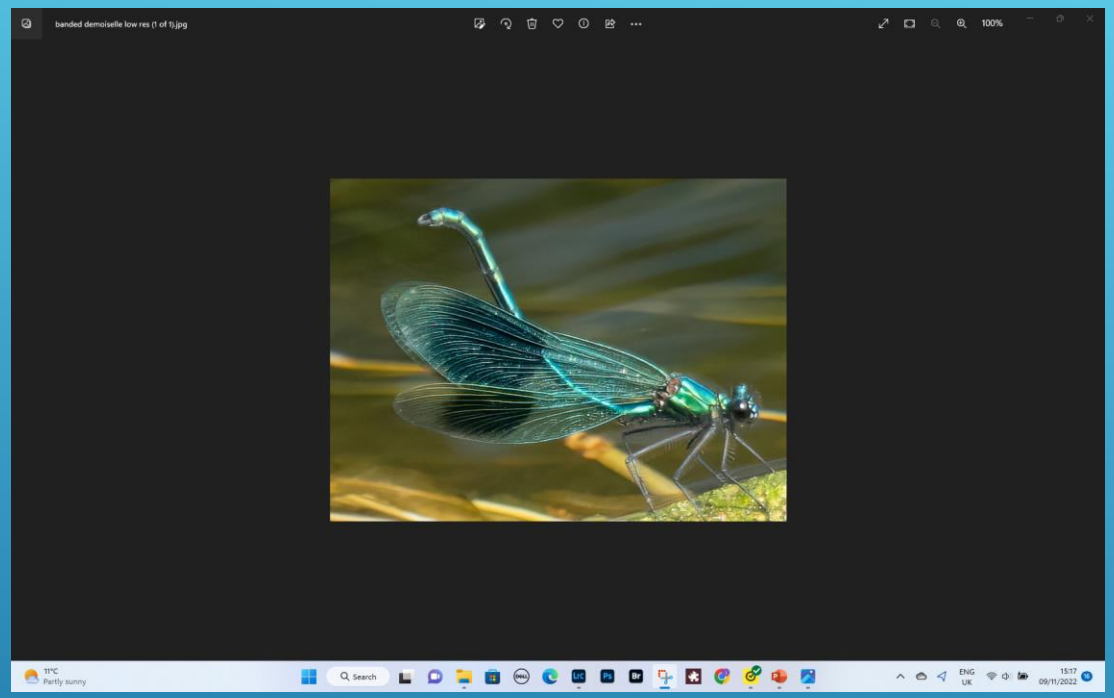
1600 x 1200 image @ 100% on 1920 x 1200 screen

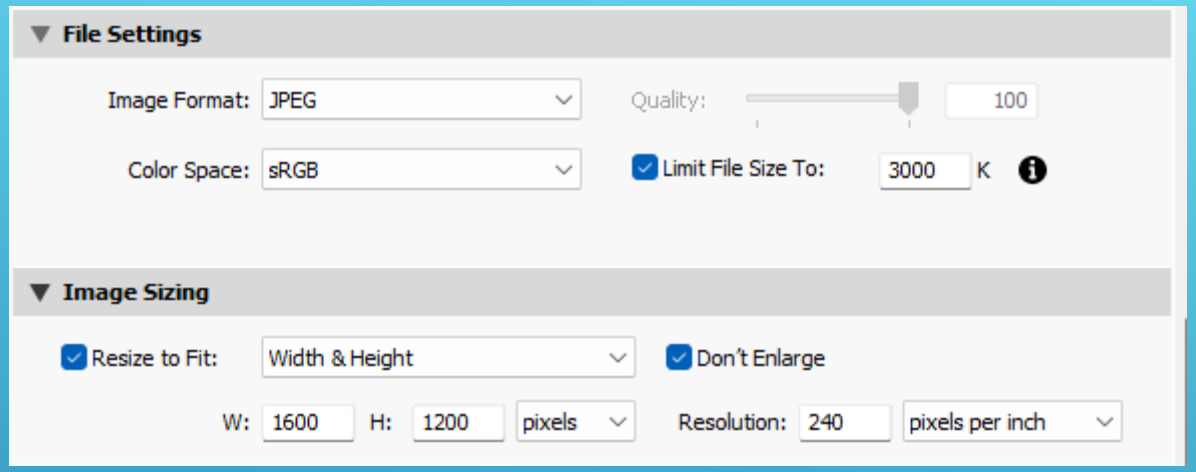
ADOBE LIGHTROOM EXPORT SCREEN



If portrait orientation image (i.e. height > width) exported with these parameters the 1200 pixel height will limit the width of the image

Lightroom export of 701 x 526 pixel image



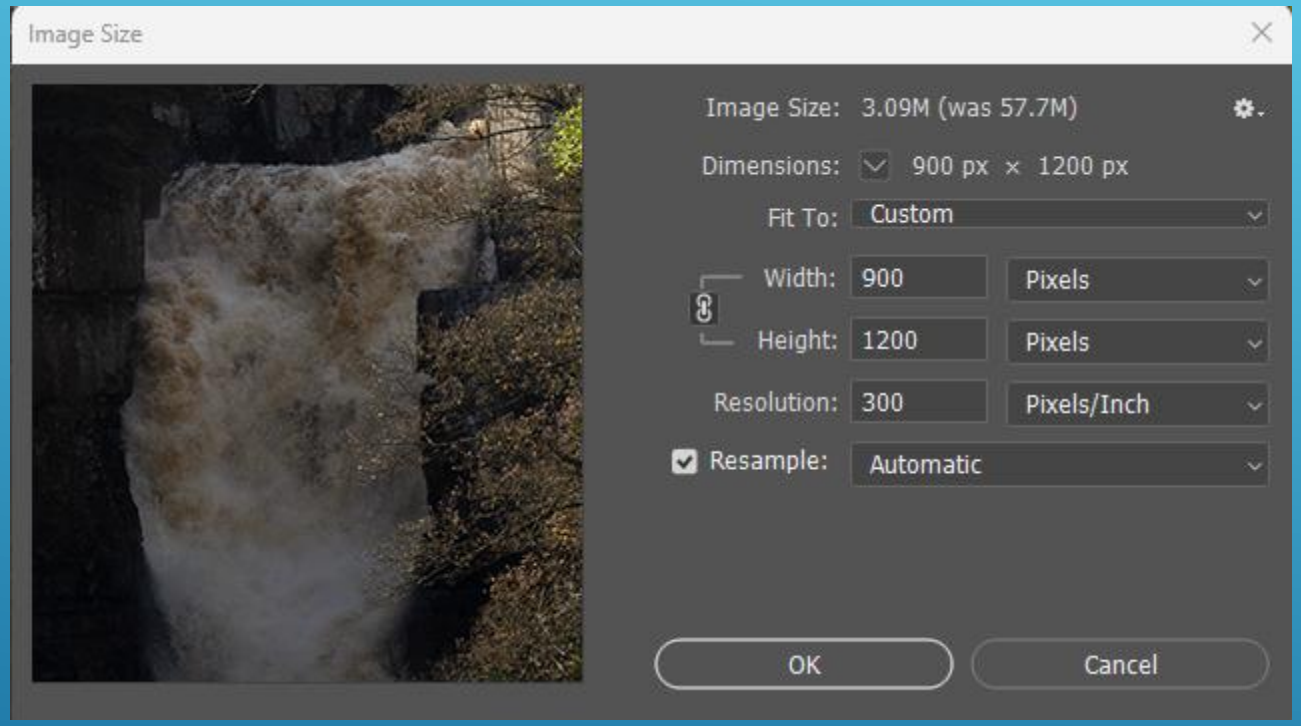


Significant crop on original image to just show Banded Demoiselle resulted in an image size of 701 x 526 pixels.
If Resize to Fit is unchecked the exported image will be 701 x 526 pixels but it will appear as a small image on a 1920 x 1200 screen
Alternatively if Resize to Fit is checked and Don't Enlarge selected the image will again be exported at 701 x 526 pixels with no reduction in quality but it will appear as a small image on a 1920 x 1200 screen

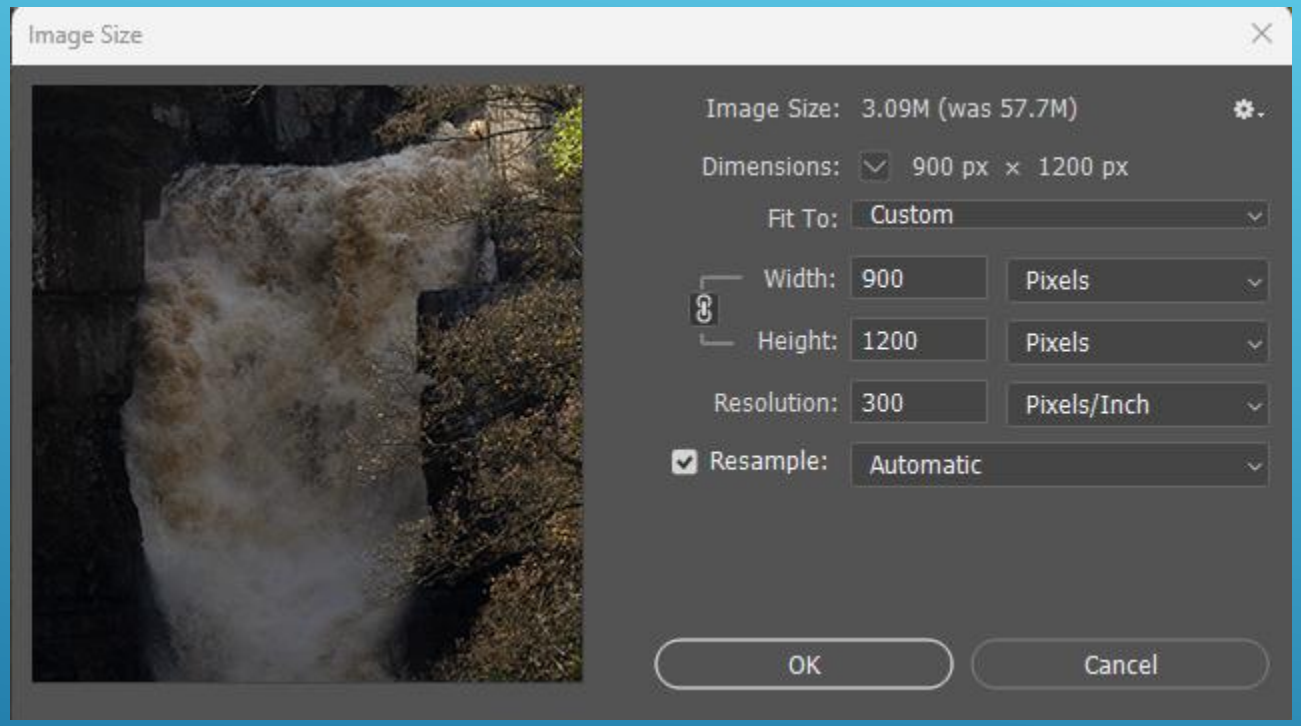
Lightroom export of 701 x 526 pixel image enlarged to 1600 x 1200 pixels

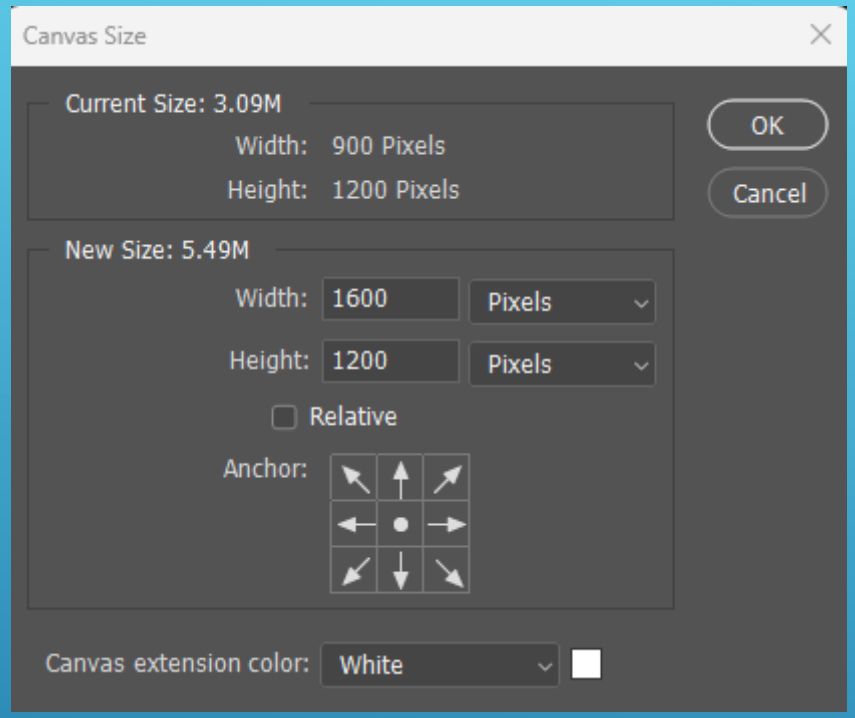
Don't Enlarge **NOT** selected so image exported at 1600 x 1200 pixels with a reduction in quality because Lightroom interpolates the original image to the selected size. The increase size is over twice the original image size. The image fills the screen

ADOBE PHOTOSHOP IMAGE – IMAGE SIZE SCREEN

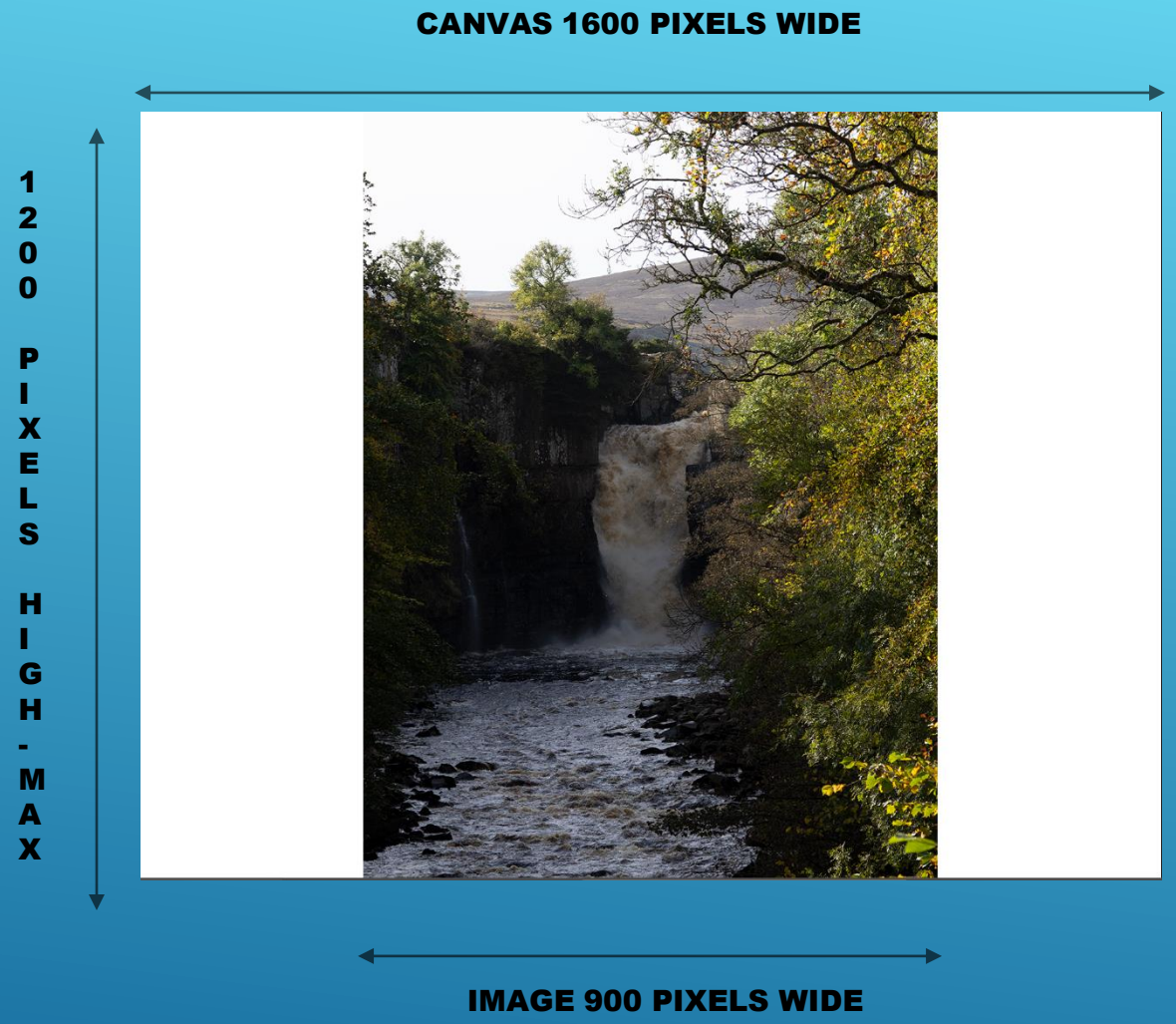


ADOBE PHOTOSHOP IMAGE – CANVAS SIZE SCREEN





Portrait format image which is 900 pixels wide has a white canvas added to make it 1600 pixels wide (see next slide)



CANVAS ADDED TO PORTRAIT FORMAT

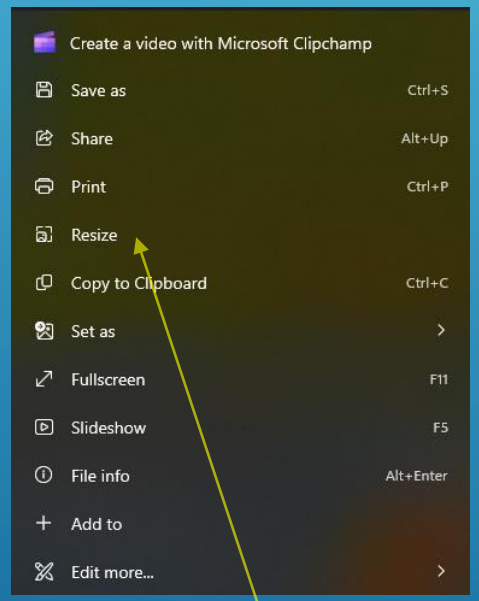
A canvas added to bring the image to the maximum dimensions.

Colour space sRGB

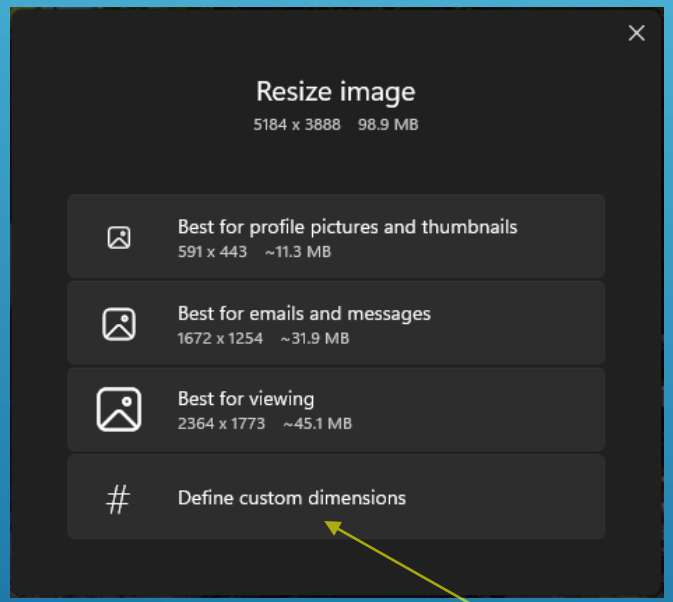
Max File Size 3MB.

MICROSOFT PHOTOS - IMAGE RESIZING

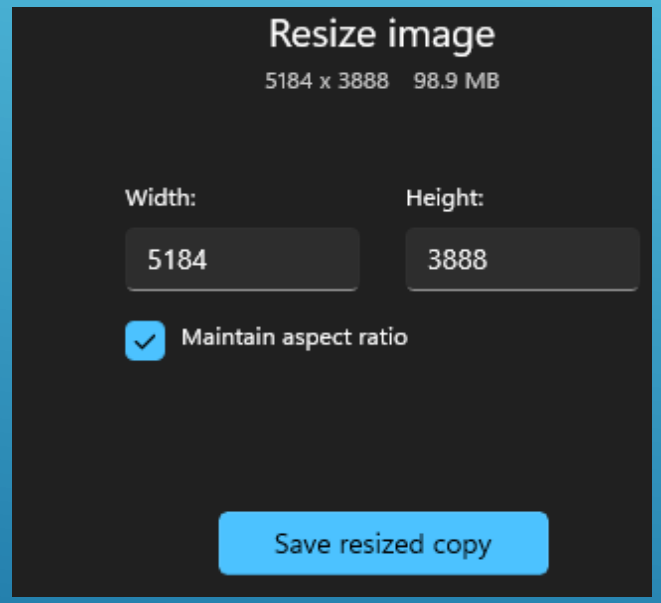
CLICK ON DOTS TO BRING UP SUB MENU

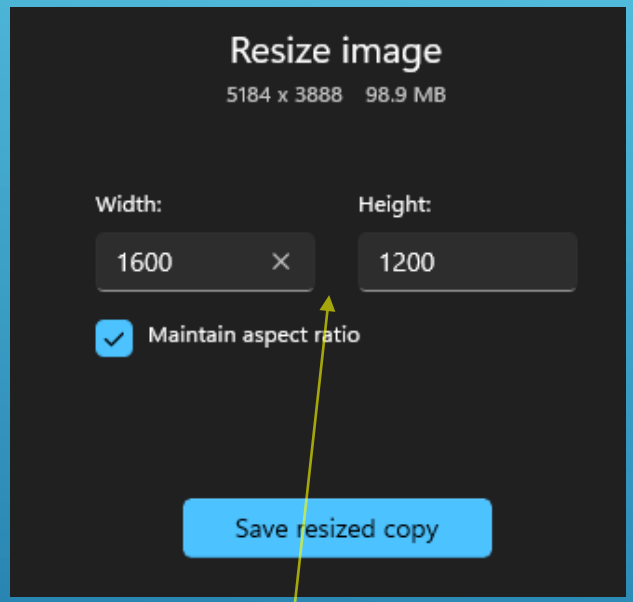


SELECT RESIZE



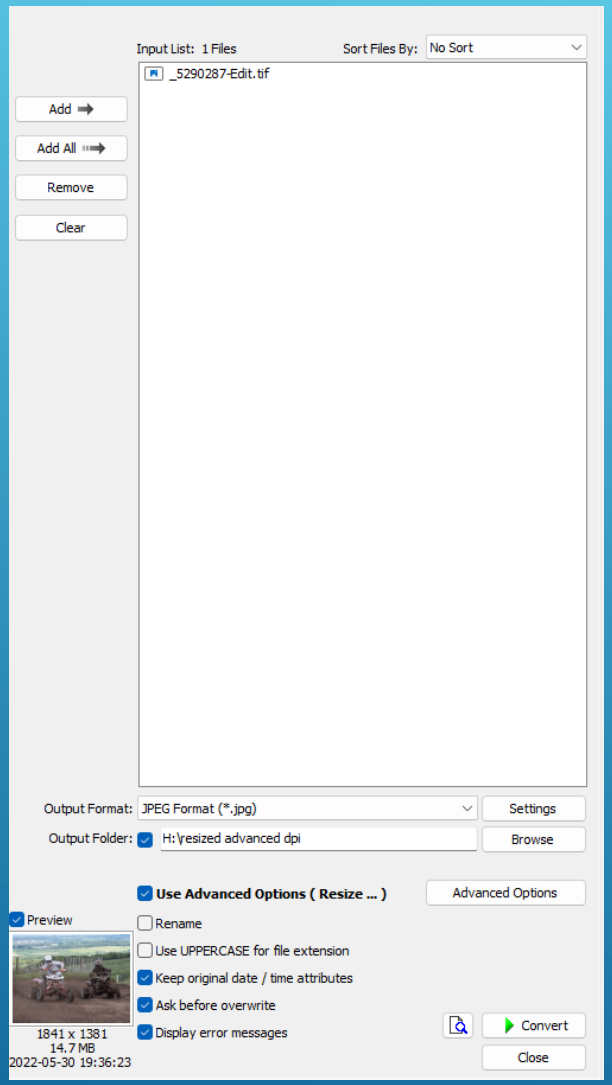
SELECT #DEFINE CUSTOM REQUIREMENTS

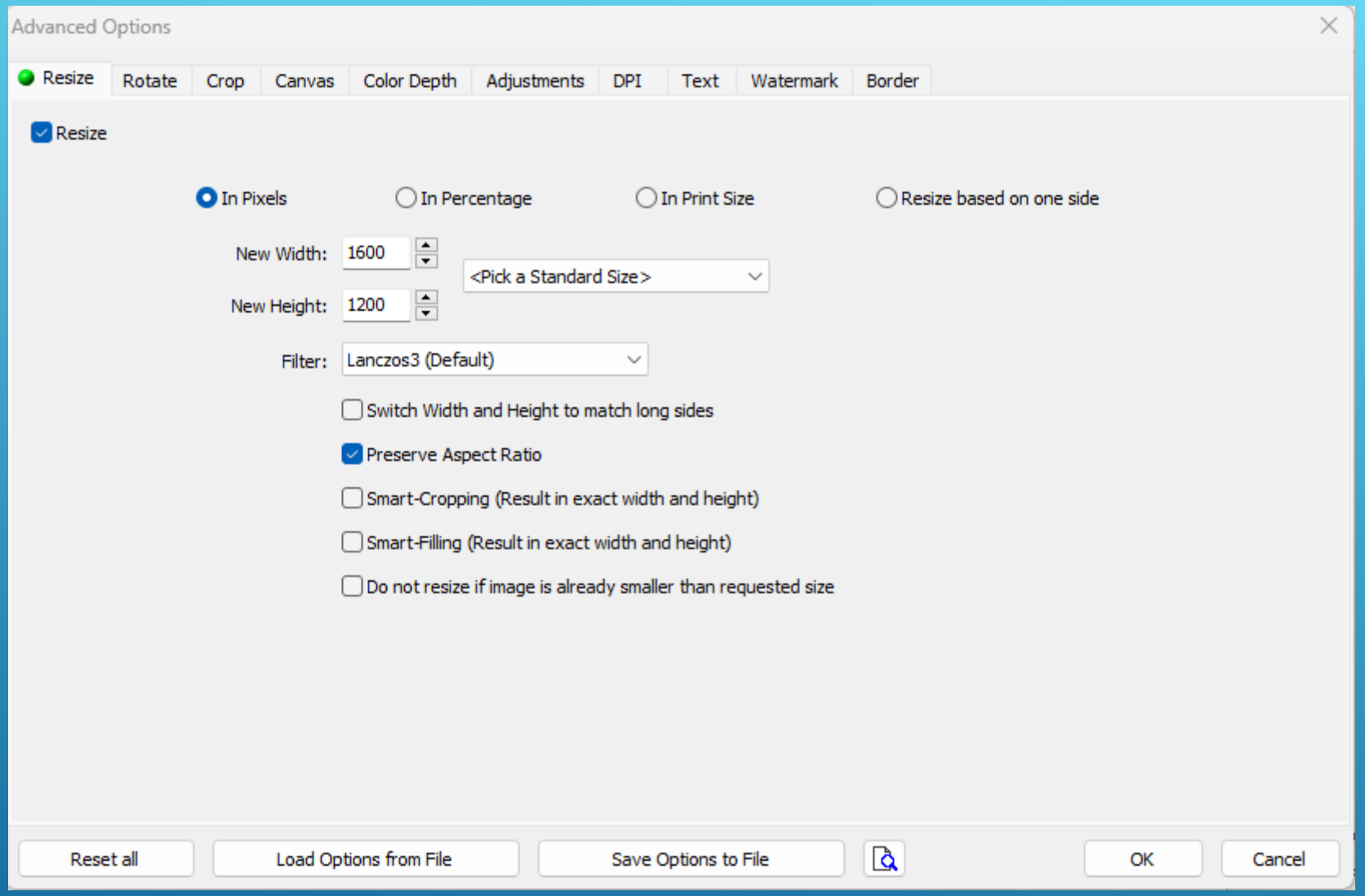




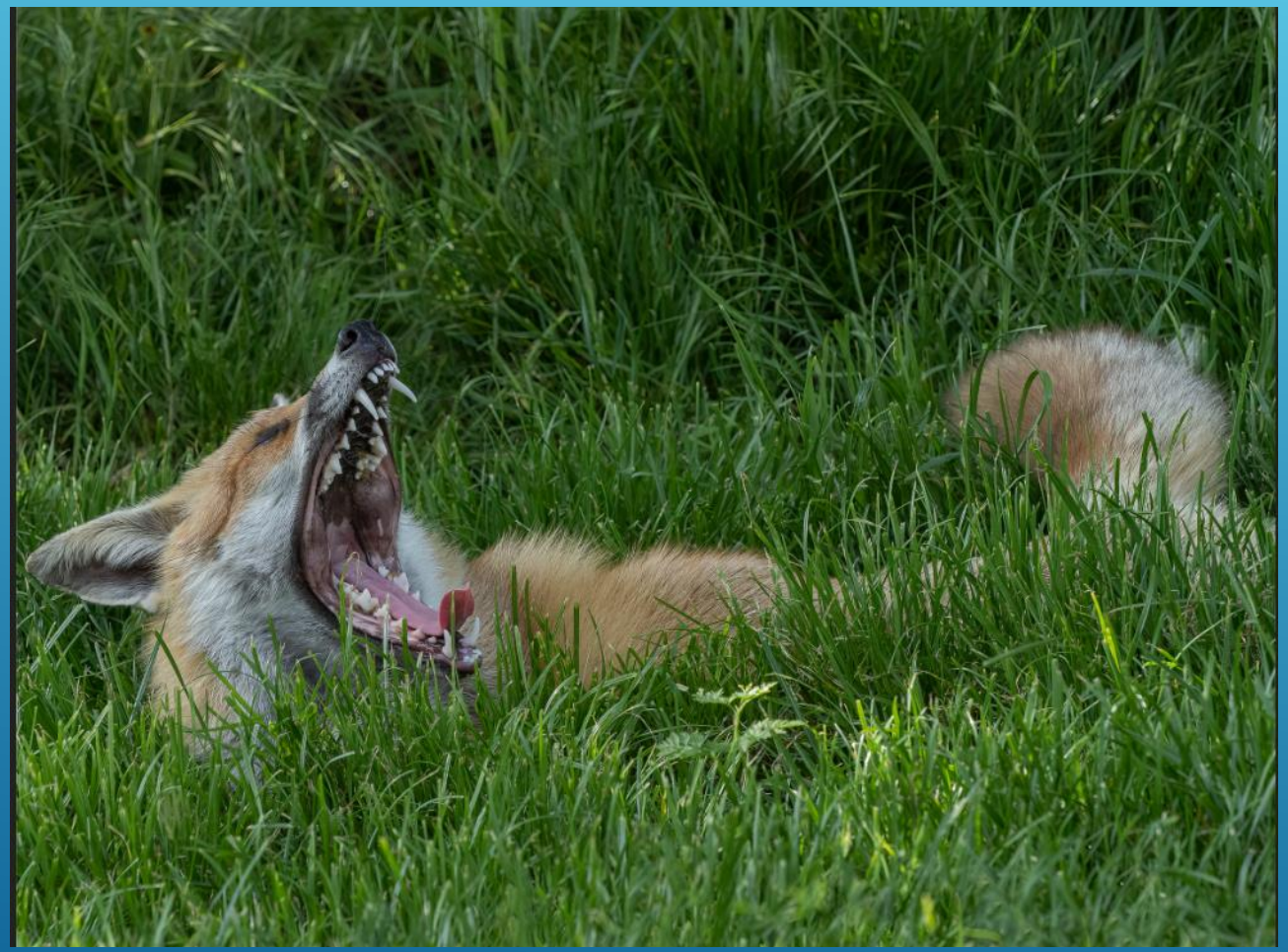
ENTER SIZE DIMENSIONS

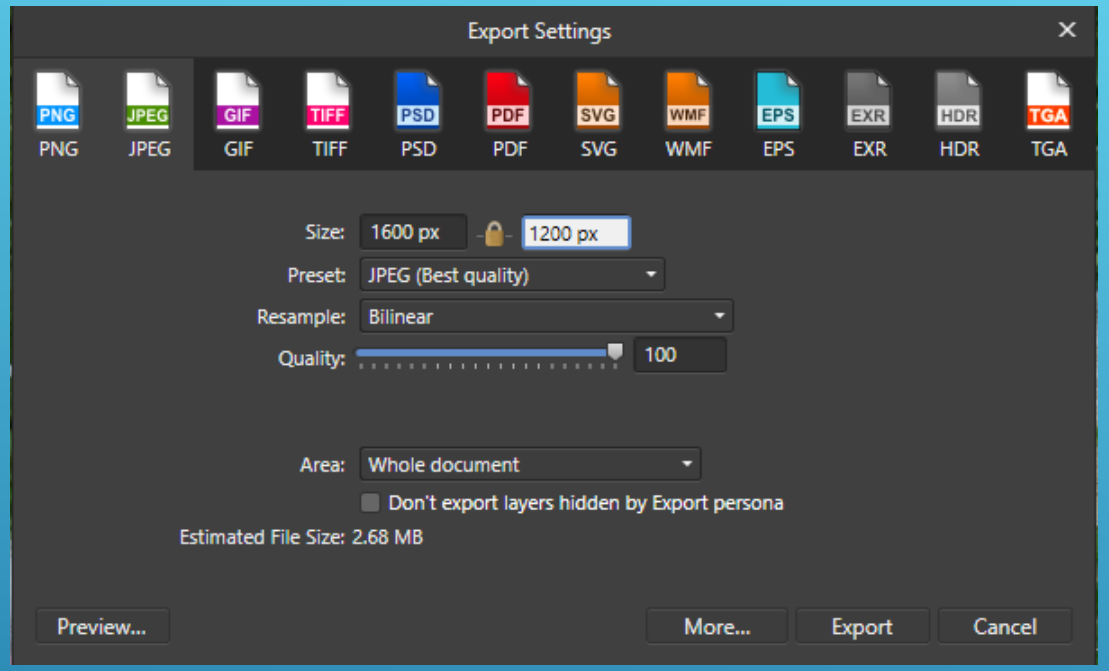
FASTSTONE PHOTORESIZER 4.4





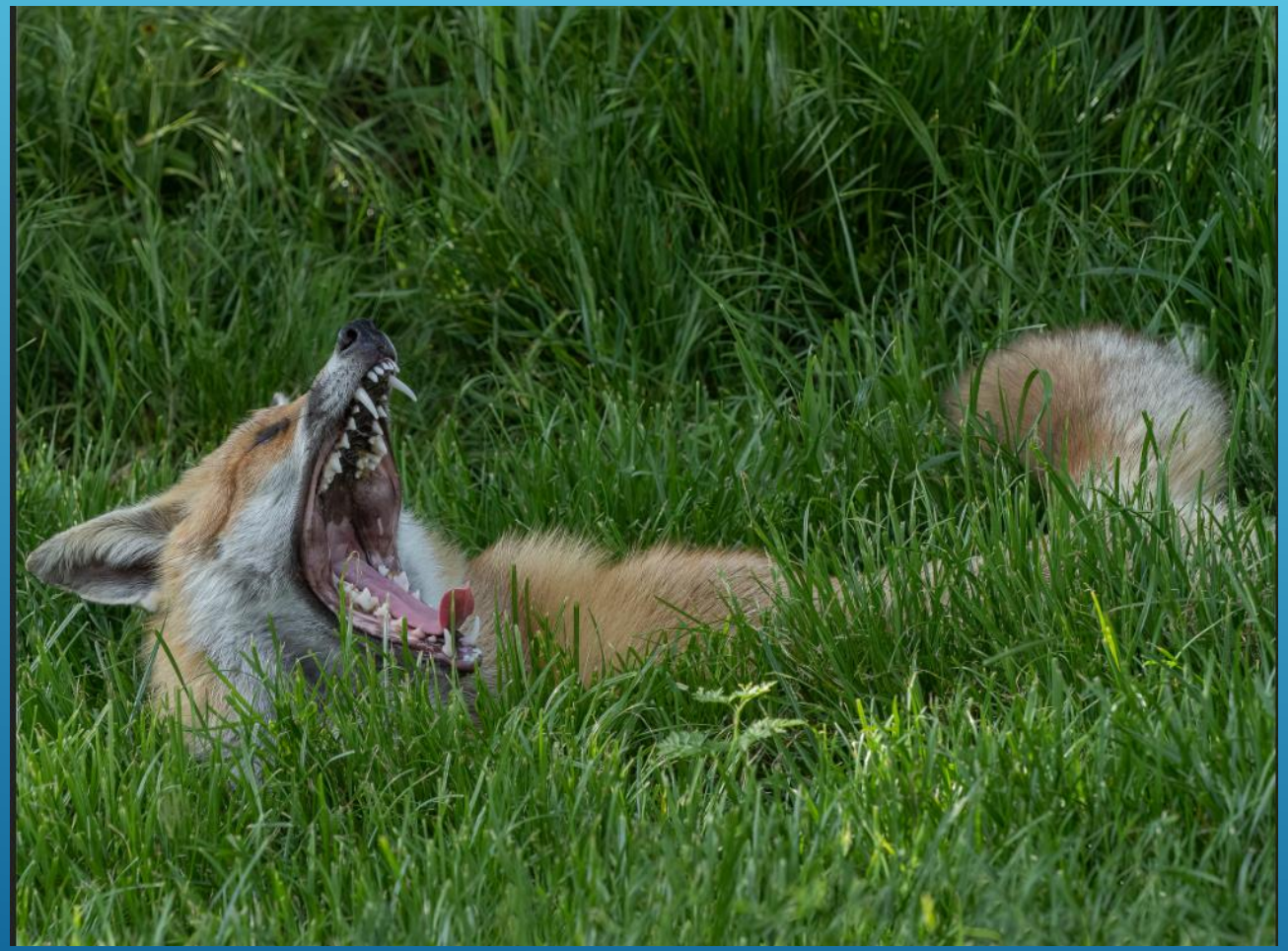
AFFINITY PDI IMAGE EXPORT (1)

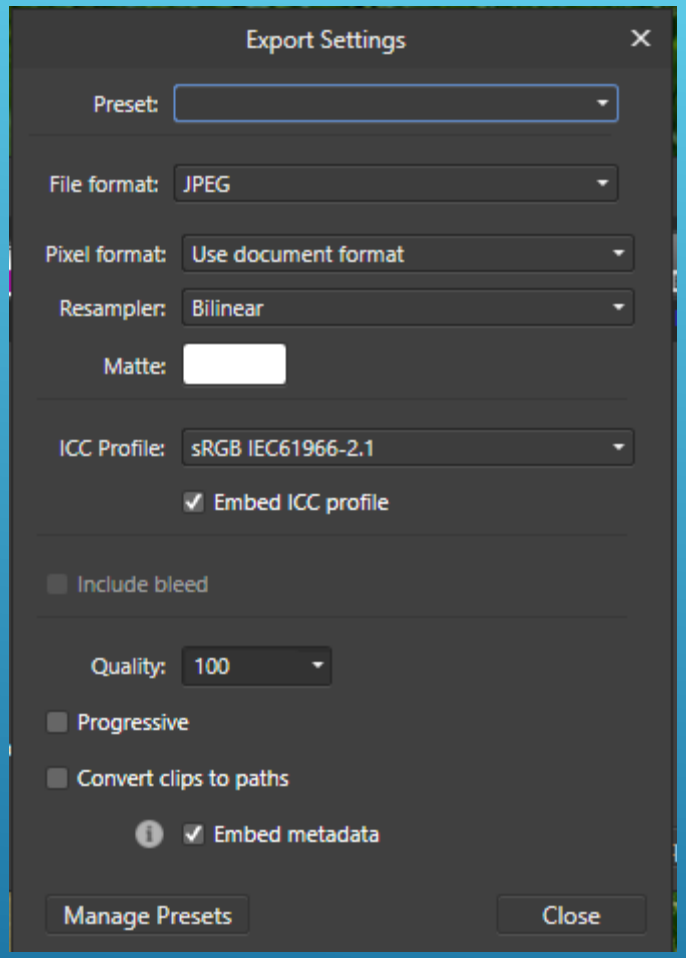




Under the File tab select Export then select JPEG. Then Select More…

AFFINITY PDI IMAGE EXPORT (2)





Under the ICC Profile select sRGB IEC61966-2.1

SIZING IMAGES FOR PRINTING

MAXIMUM MOUNT DIMENSIONS – LANDSCAPE FORMAT

50 cm WIDE - MAXIMUM

40 cm HIGH MAX

MAXIMUM MOUNT DIMENSIONS – PORTRAIT FORMAT

40 cm WIDE - MAX

50 cm HIGH MAX

What is PPI?

The word “pixel” means a picture element. Every photograph, in digital form, is made up of pixels. They are the smallest unit of information that makes up a picture. Usually round or square, they are typically arranged in a 2-dimensional grid

PPI stands for pixels per inch. PPI describes the resolution of a digital image, not a print. PPI is used to resize images in preparation for printing.

The size at which an image appears on your screen depends only on two things - the pixel dimensions of the image and the display resolution of your screen. As long as you've set your screen to its native display resolution then an image will be displayed pixel-for-pixel. In other words, each pixel in the image will take up exactly one pixel on your screen. For example, a 1600 x 1200 pixel image would fill a 1600 x 1200 pixel area of a 1920 x 1200 pixel screen (WUXGA). No more, no less. And no matter what you set the image's resolution to in Photoshop, Affinity etc, whether it's 72 ppi, 300 ppi or 3000 ppi, it will have no effect at all on how large or small the image appears on the screen

1600 x 1200 image @ 100% on 1920 x 1200 screen

PPI Print Standards

When setting an image to be printed, it’s best to use the correct pixels per inch.
A number between 200 and 300 is generally accepted to represent "photographic quality" at an arm's length viewing distance.
If an image has a resolution of < 200 PPI, it just shouldn't ever hit a printer for club images which are viewed at arm’s length.
The optimal printing resolution to get the most out of your printer is likely to fall within the range of 240-360ppi.
Most printing laboratories advise JPEG images at 300 PPI.

DPI Print Standards

In printing, DPI (dots per inch) refers to the output resolution of a printer.
Photographic printers such as the Canon Pixma Pro 100 offer a resolution of 4800 X 2400dpi
On the Canon printer you can change the DPI by selecting the Print Quality
from High, Standard, Fast and Custom.

CALCULATION OF PRINTED IMAGE SIZE FROM PIXEL DIMENSIONS

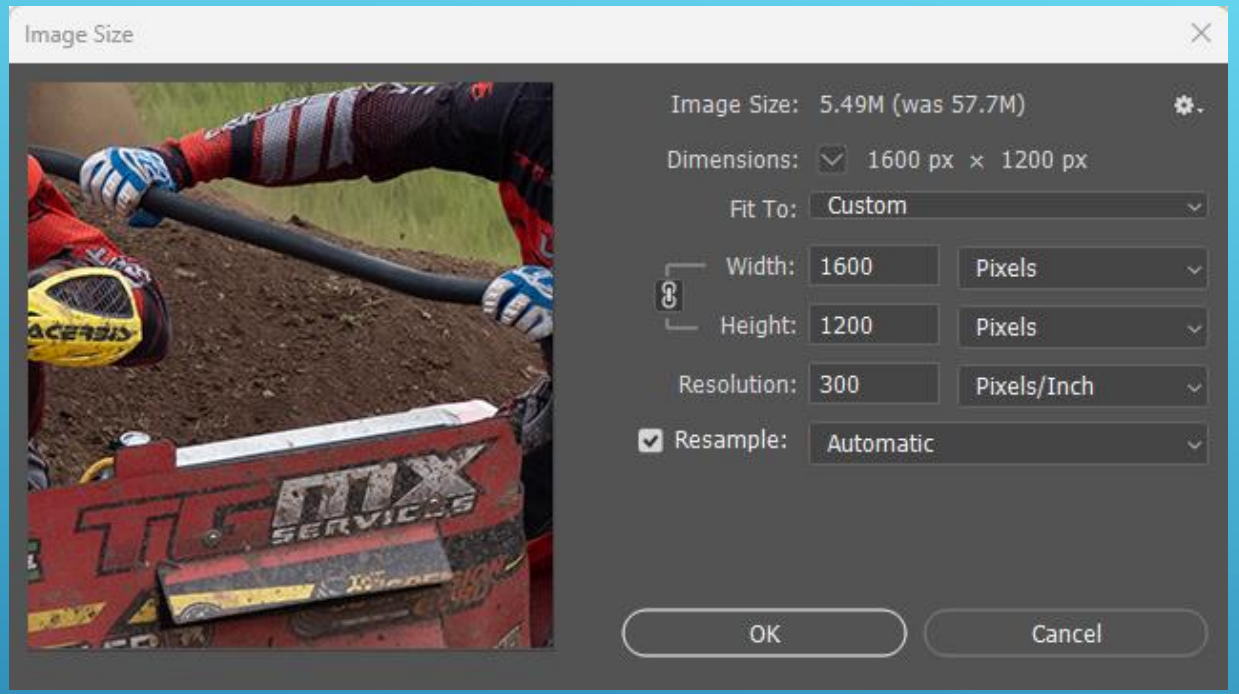


Image size = 1600 x 1200 pixels

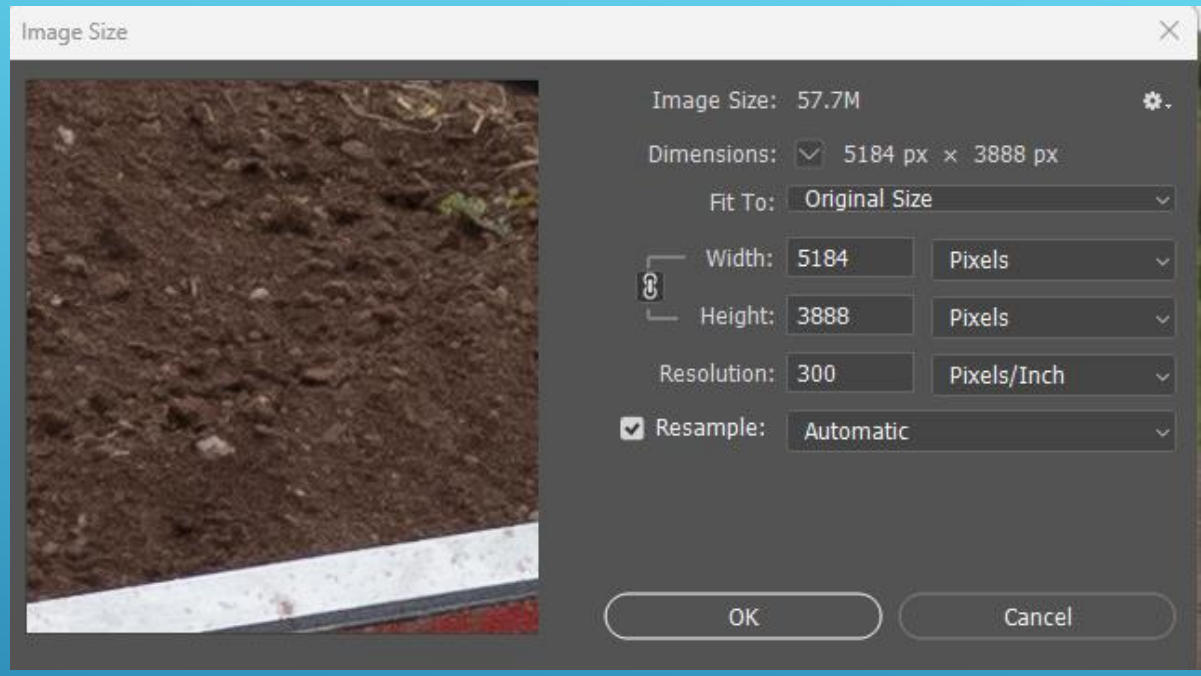
Print size @ 300ppi = $\frac{1600}{300} \times \frac{1200}{300}$ = 5.3 x 4.0 inches

Print size @ 200ppi = $\frac{1600}{200} \times \frac{1200}{200}$ = 8.0 x 6.0 inches

Paper size = 16 ins x 12 ins

Print resolution = $\frac{1600}{16} \times \frac{1200}{12}$ = 100 ppi UNACCEPTABLE QUALITY FOR VIEWING AT ARMS LENGTH

CALCULATION OF PRINTED IMAGE SIZE FROM PIXEL DIMENSIONS

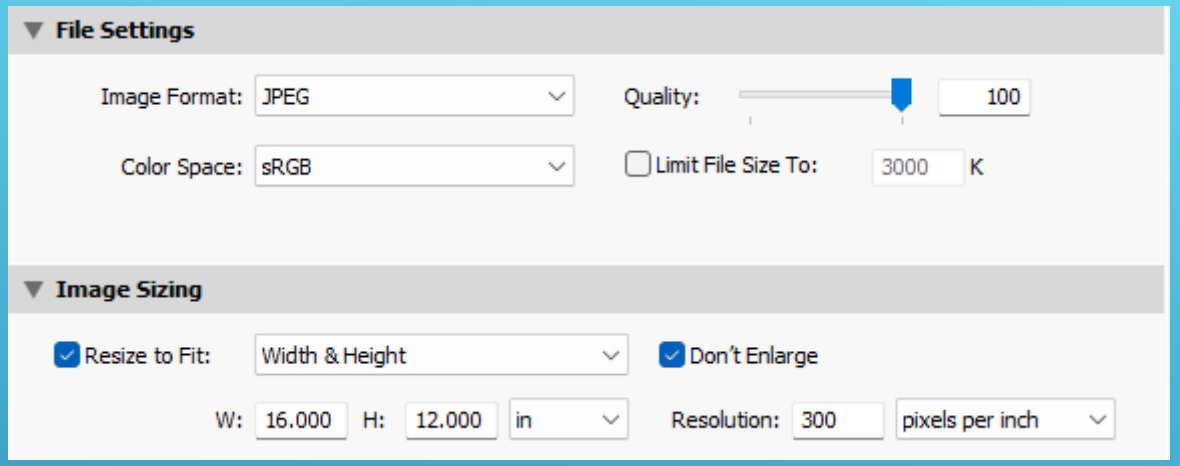


Picture size = $\frac{5184}{300}$ x $\frac{3888}{300}$ = 17.3 x 13.0 inches

Alternatively you can change the units from Pixels to Inches and you will obtain the size.

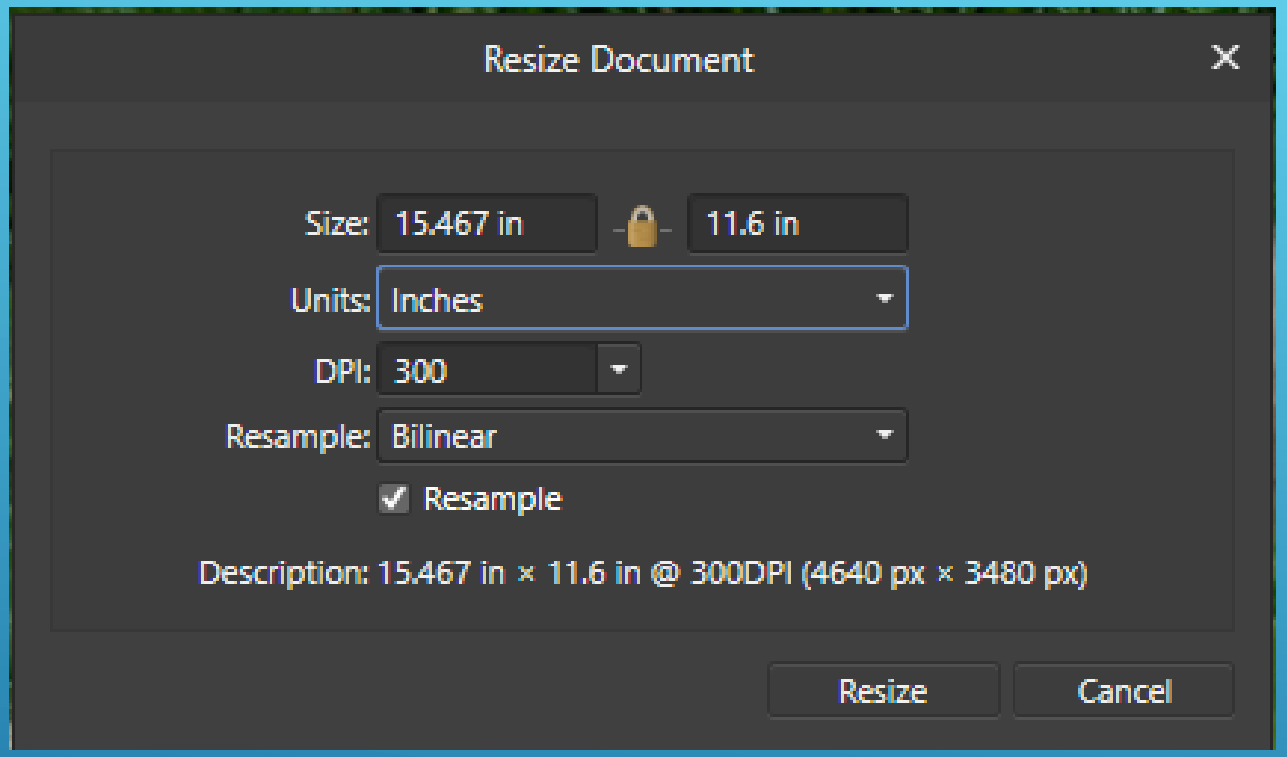
Common photo print sizes in inches	Photo print sizes in centimetres	Required Image size in pixels @ 300 PPI resolution
10x8	25.4 x 20.32	3000 x 2400
A4	29.7 x 21.0	3508 x 2480
12x8	30.48 x 20.32	3600 x 2400
12x10	30.48 x 25.4	3600 x 3000
14x10	35.56 x 25.4	4200 x 3000
15x10	38.1 x 25.4	4500 x 3000
16x12	40.64 x 30.48	4800 x 3600
A3	42.00 x 29.70	4961 x 3508
18x10	45.72 x 25.4	5400 x 3000
18x12	45.72 x 30.48	5400 x 3600

Lightroom export of 4640 x 3480 pixel image for Printing



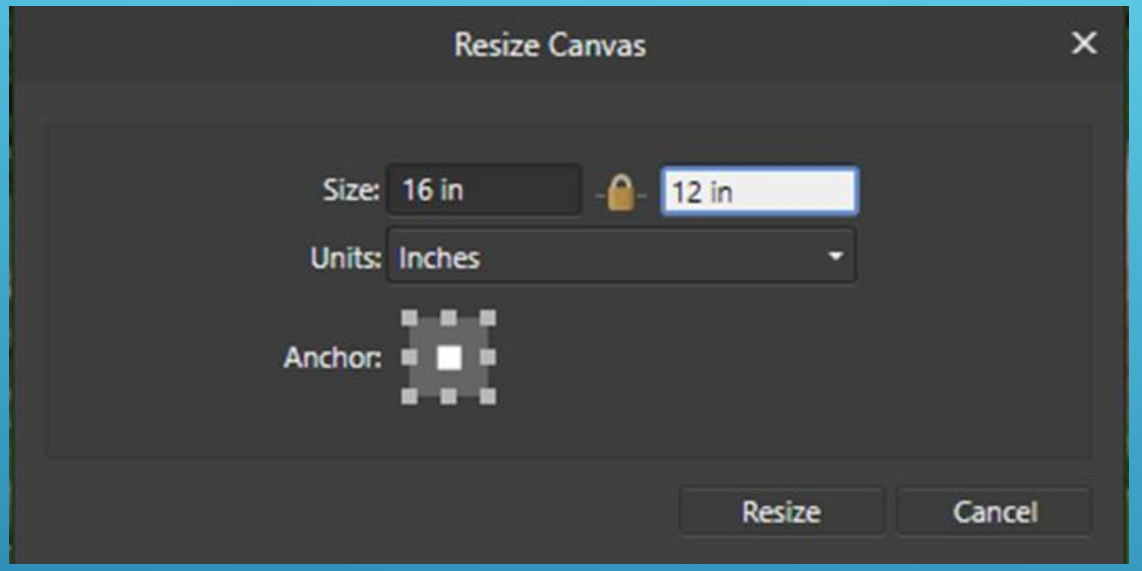
If Don't Enlarge is CHECKED image will be 15.5 x 11.6 inches on 16 x 12 inch paper. The file is 16.5 MB so the Limit File Size To box is not checked and the Quality is selected as 100%. Therefore for printing from Lightroom ensure that the Limit File Size To box is unchecked. Note: If Don't Enlarge is NOT CHECKED the image would have been increased by just over 1% so the reduction in quality would not have been noticeable.

AFFINITY IMAGE –VIEW SIZE OF IMAGE IN INCHES



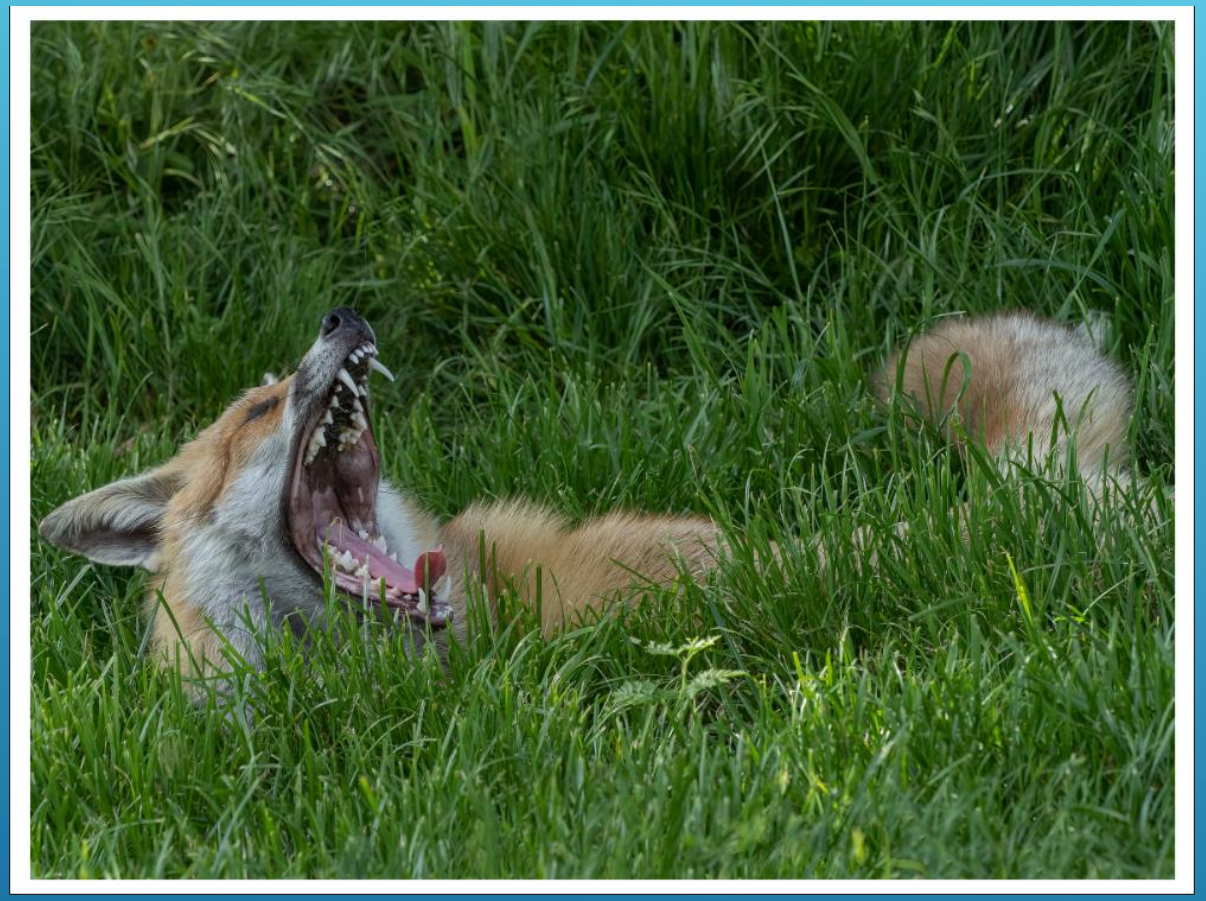
To check the size of the image in inches under the Document tab in the Photo Persona select Resize Document which shows the image is 15.5 x 11.6 inches. To print on 16 x 12 paper Under the Document tab in the Photo Persona select Resize Canvas and enter 16 x 12 inches. Ensure the Anchor point is the middle for the image to be placed in the middle of the canvas.

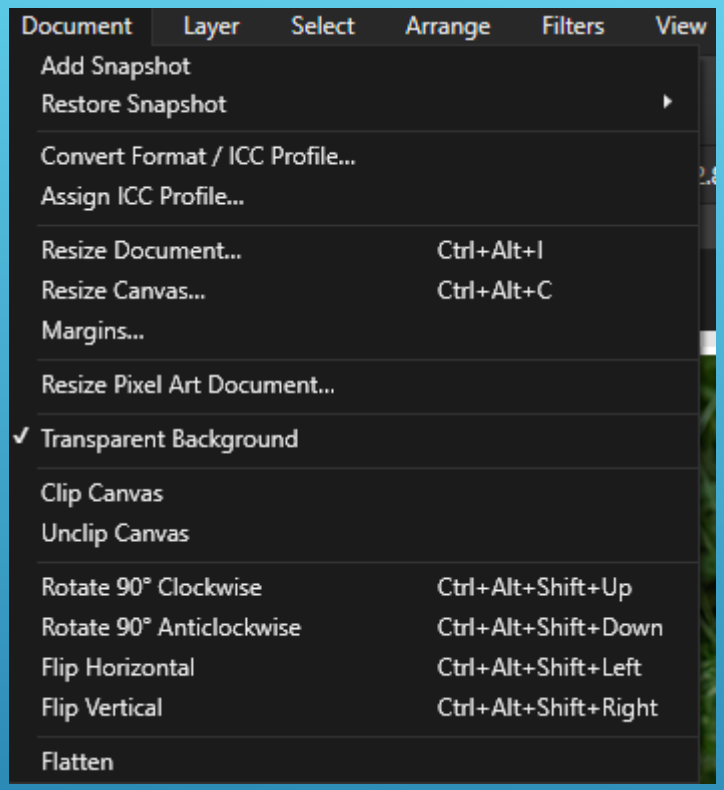
AFFINITY IMAGE – CANVAS SIZE SCREEN



To print on 16 x 12 paper Under the Document tab in the Photo Persona select Resize Canvas and enter 16 x 12 inches. Ensure the Anchor point is the middle for the image to be placed in the middle of the canvas. A transparent canvas is added

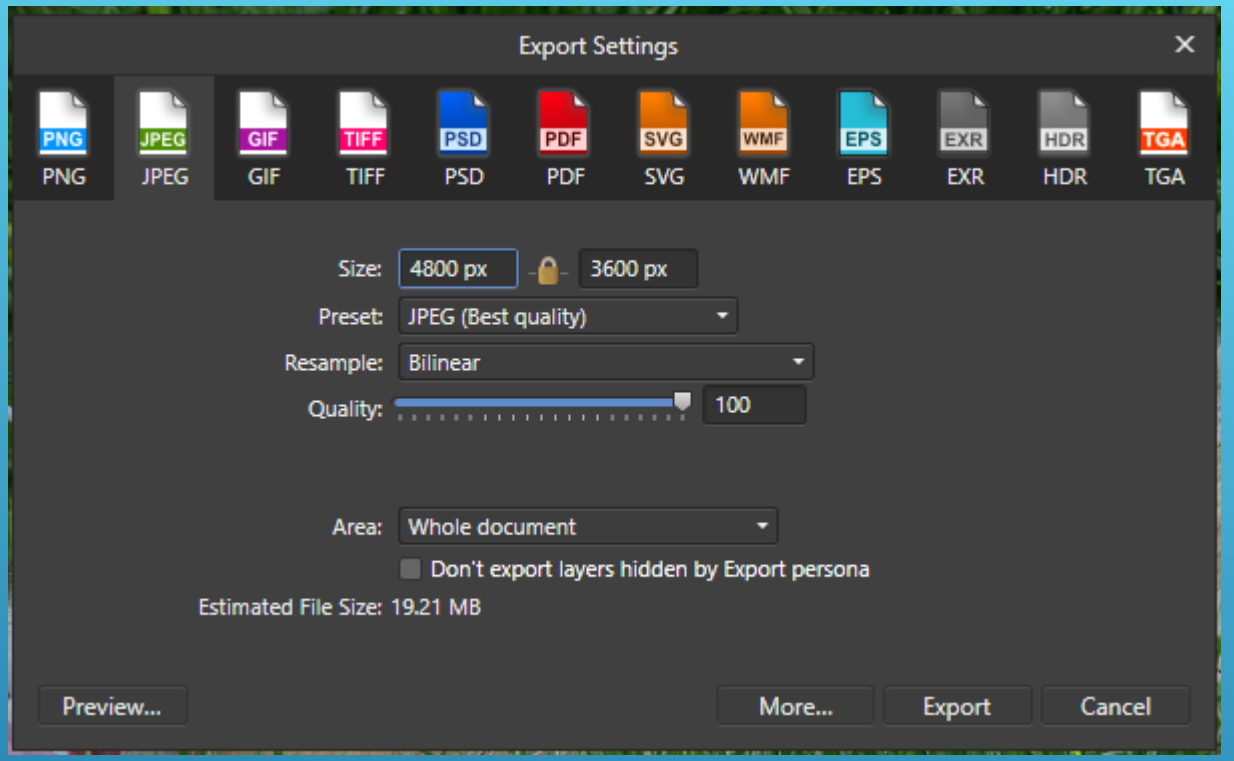
AFFINITY IMAGE – CHANGE CANVAS COLOUR





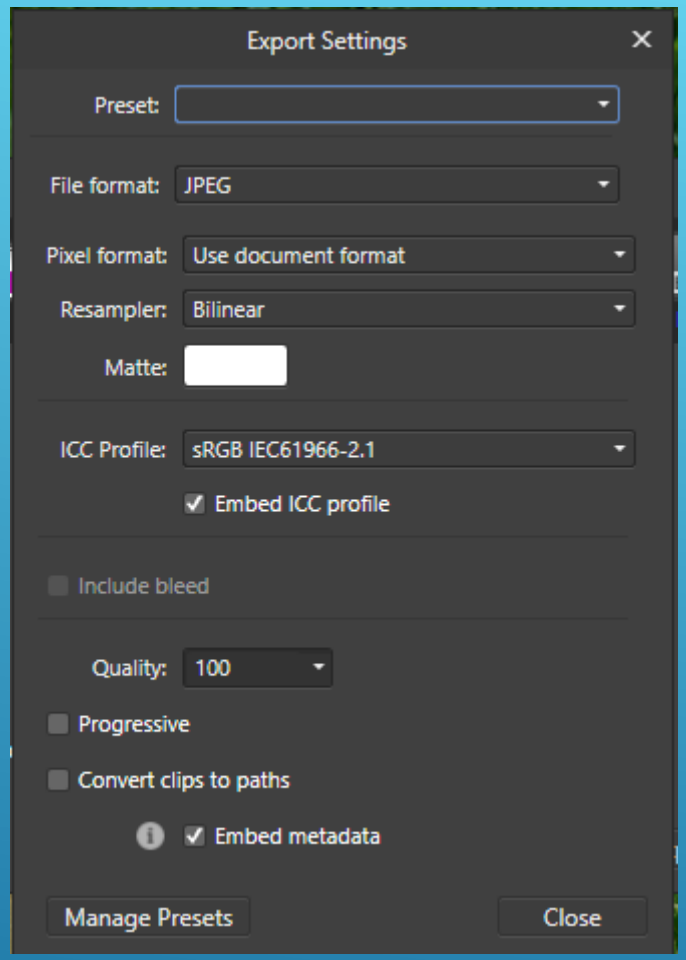
To change the colour of the canvas from Transparent to White go the Document tab in the Photo Persona and uncheck Transparent Background

Affinity export of 16 x 12 image for Printing (1)



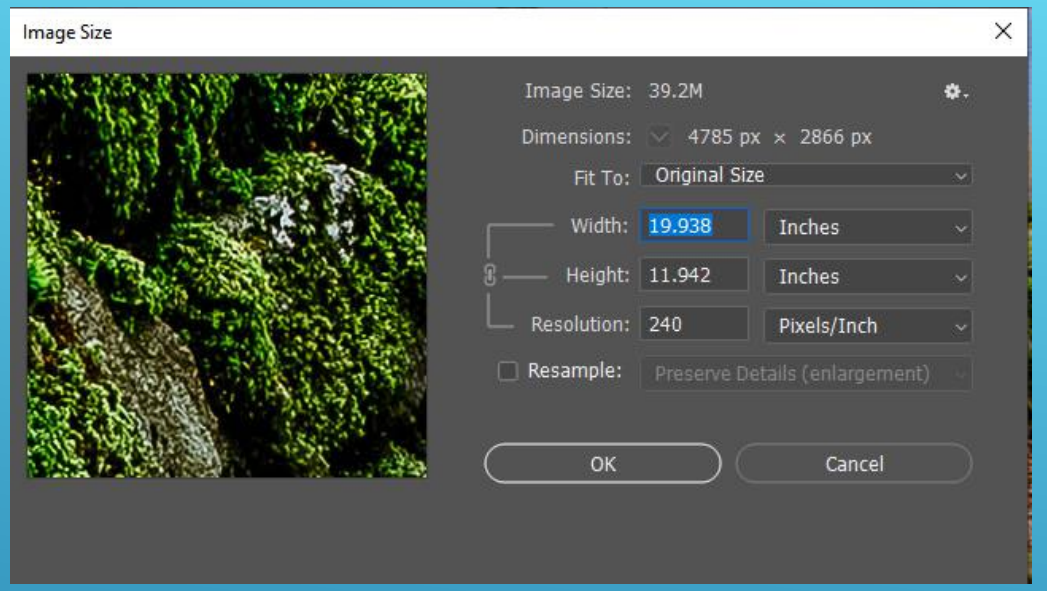
Under the File tab select Export then select JPEG. Then Select More…

Affinity export of 16 x 12 image for Printing (2)

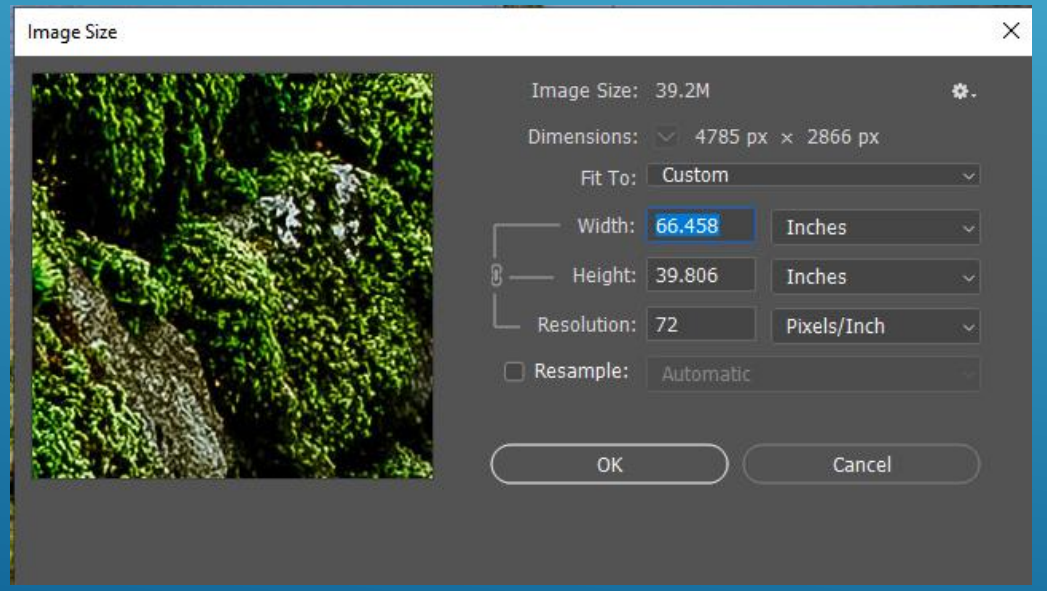


Under the ICC Profile either select your printer made and model or sRGB IEC61966-2.1 if using an external printer.

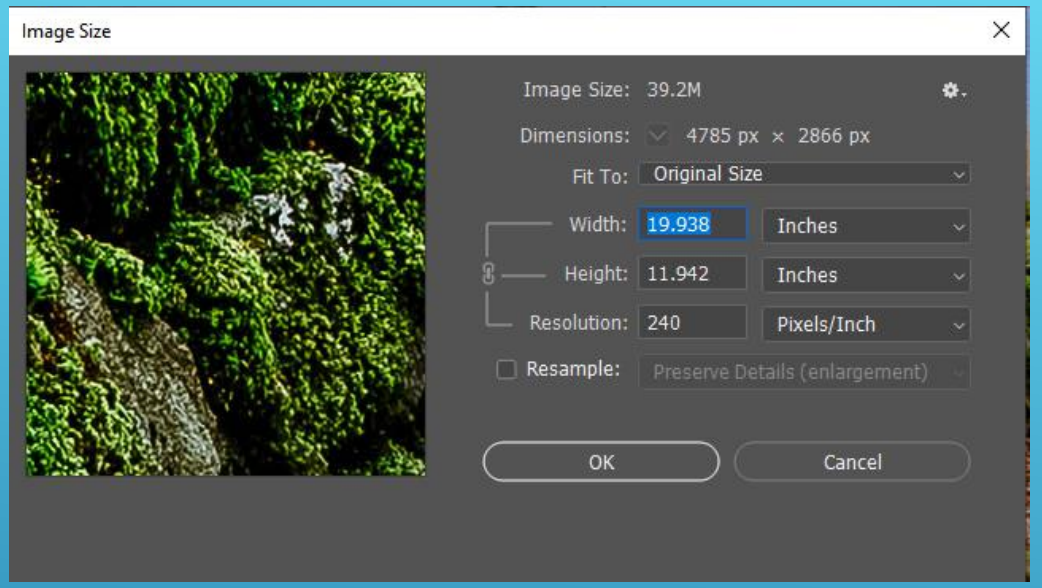
RESIZING IMAGES (i.e. Resample box unchecked)



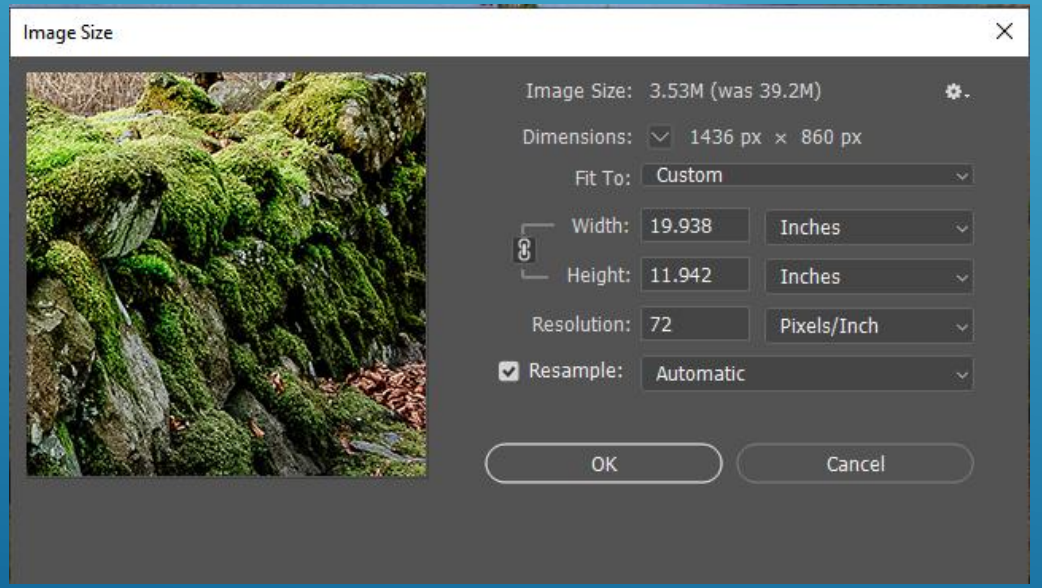
Resizing the image does not affect the number of pixels, but rather the print output. The image dimensions are 4785 pixels by 2866 pixels and at 240 PPI this measures 19.9 x 11.9 inch. When *resized* to 72 PPI the number of pixels are unchanged and image is resized to 66.5 x 39.8 inches



RESAMPLING [(INTERPOLATION) i.e. Resample box checked]



Resampling (Interpolation) an image refers to adjusting the amount of pixels in an image to retain the same printed height and width. The output size of this image is 19.9 x 11.9 inches. At 240 PPI the image dimensions are 4785 pixels by 2866 pixels and file size 39.2M, but when *resampled* to 72 PPI the number of pixels is reduced to 1436 pixels by 860 pixels and the file size is reduced to 3.5M.



COMPETITION ENTRY SYSTEM

To assist the Competition Secretary in managing internal competition entries the Committee has agreed that for future internal competitions the club will use Film Free Projection Extended (FFPX) competition software. FFPX requires members to enter data into the File Properties when they submit entries.

Projected Digital Image (PDI) entries

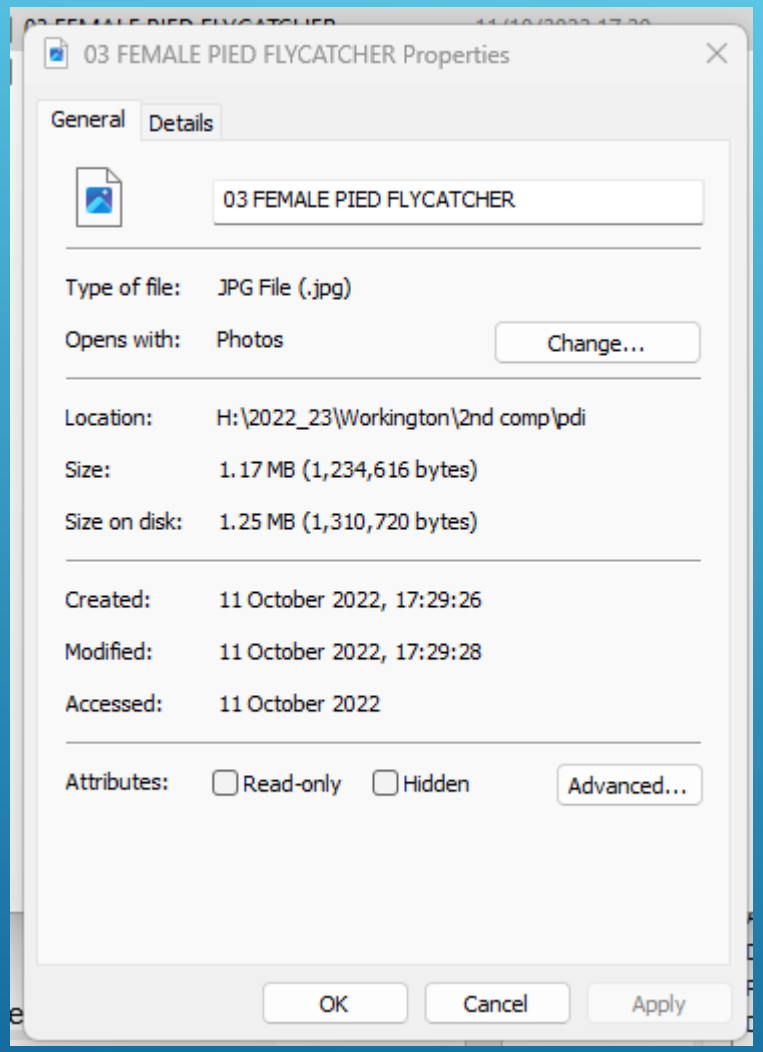
Members entries should comply with the following:-

Projected Digital Image (PDI) entries sized at a maximum of 1600 x 1200 pixels –File name comprising Competitor Number and Image Title e.g. 03 FEMALE PIED FLYCATCHER

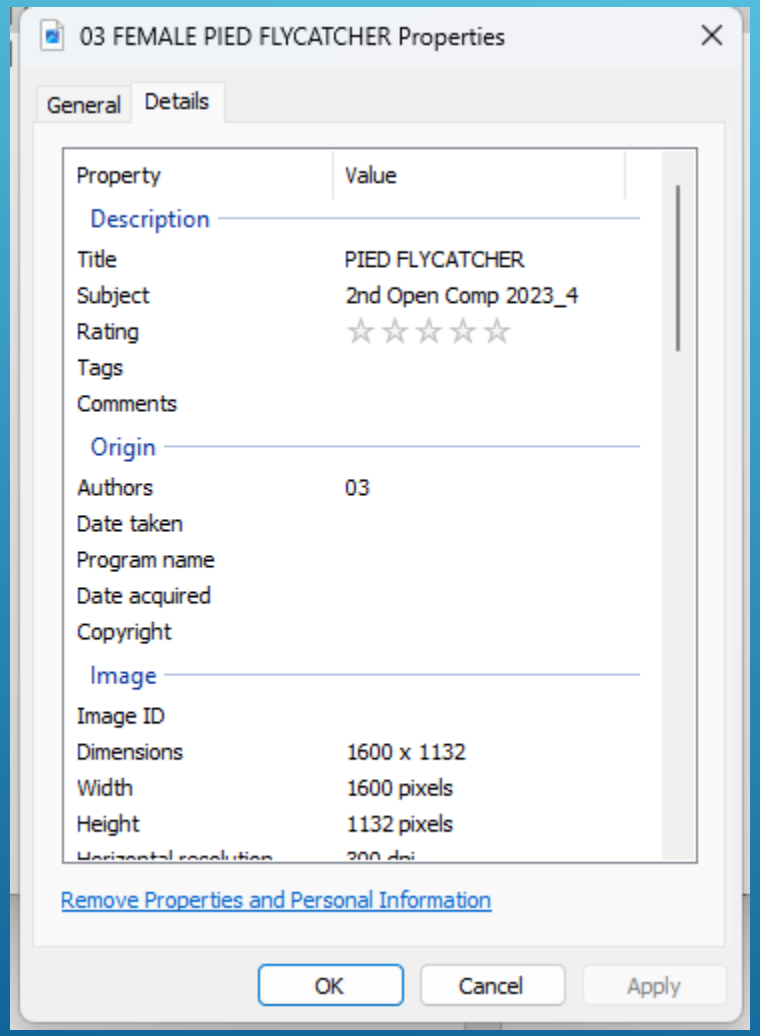
Before submitting entries to the Internal Competition Secretary, the member shall also enter the following data into the File Properties.

From the Context menu Open the Properties section of the file.

PDI entry Properties General Tab



PDI Entry Properties Detail tab



- In the **Description** section Title field add the Image Title (no members Competition number)
- In the **Description** section Subject field add the Competition Title
- In the **Origin** section Author Field add the Members Competition Number

- Take care to remove the details in the Copyright field if they contain information can identify the author (judges can see these fields and we try to avoid 'personalities' influencing the judge's decisions)

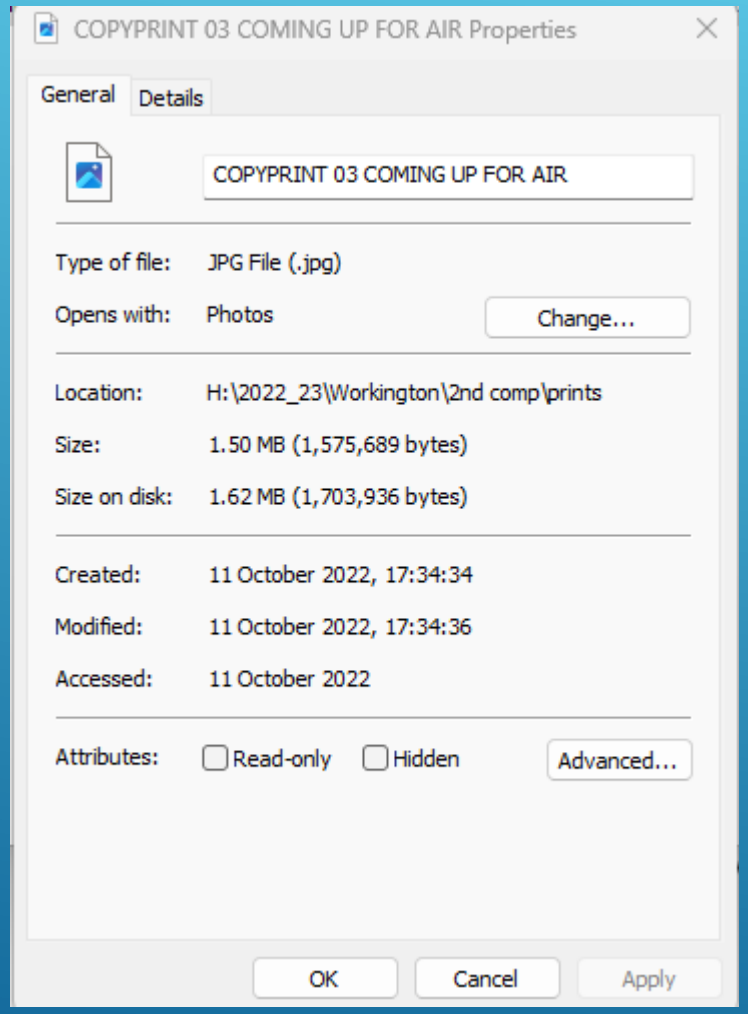
PDI files associated with Print entries to enable digital projection of Print entries

Entries should comply with the following:-

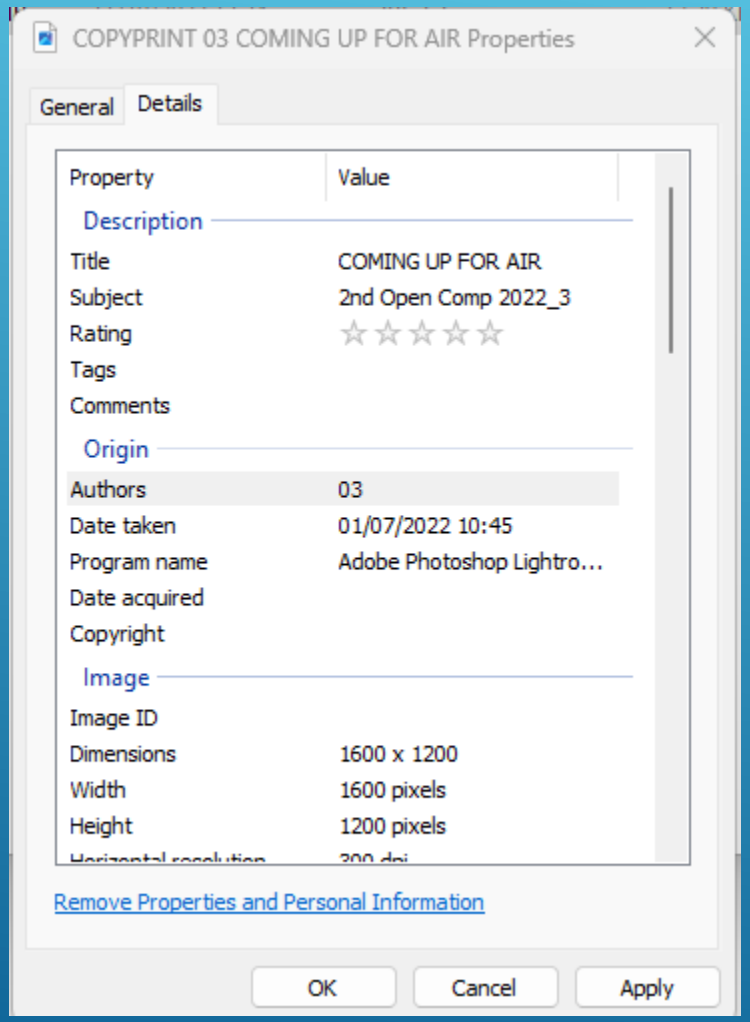
Print PDIs sized at a maximum of 1600 x 1200 pixels - File name comprising COPYPRINT Competitor number and Image Title.

Before submitting entries to the Internal Competition Secretary, the member shall also enter the following data to the File Properties.

PDI files associated with Print entries to enable digital projection of Print entries
Properties General tab



PDI files associated with Print entries to enable digital projection of Print entries
Properties Detail tab



- In the **Description** section Title field add the Image Title (no COPYPRINT or members Competition number)
- In the **Description** section Subject field add the Competition Title
- In the **Origin** section Author Field add the Members Competition Number

- Take care to remove the details in the Copyright field if they contain information can identify the author (judges can see these fields and we try to avoid 'personalities' influencing the judge's decisions)

THE END