

Techniques workshops

Basic guide to printing including
Printshop at Chi Uni





Subjects

- Printing challenges
- What makes a good “club print”
- Workflow
- Image sizing for printing
- Readyng your digital work for the Print Shop
- Mounting your work



Commercial Printing or DIY – you need this!

- Most of this presentation applies equally to printing yourself or using a commercial printer such as Chichester Uni Print Shop
 - Aspect ratios
 - Final sizing
 - Paper choice (or not)
 - Mounting your masterpiece
- They also apply to Projected Digital Images (PDI's)



What makes a good Club Standard print?

- Communicates your vision, Why take it, why share it.
- Fits the subject matter of the competition clearly, or tongue in cheek?
- Shows what you want to show unambiguously
- Has immediate impact, but keeps the viewer interested
- Tells a story, ask questions of the viewer, creates an emotional response in the viewer.
- Should be simple, rather than busy and complicated with lots of different points of interest.

Preparing an image for a Print Competition – Top Tips



- The rule of thirds is one of the most commonly used “rules”.
 - Sometimes breaking the rules works too ...
- It is often said that odd numbers of objects are more satisfying than even numbered.
- Red coloured objects attract our attention,
 - so add impact to an object or location in an image.
- Avoid things that distract from your message
- Horizons should be level and verticals vertical or obviously angled.



Preparing a print for a Club competition – Top Tips

- Avoid losing key features at the edges.
 - However, a deliberate crop of much of a face draws attention to what you want to show.
- The eye is drawn to light and lighter areas in an image,
 - so the part you want the viewer to concentrate on should be a little lighter than the rest.
 - Bright areas away from your point of interest will draw the eye away, even more so at the edges.
- The important part of the image needs to be sharp.
 - Generally, the foreground needs to be sharp.
 - A landscape usually all needs to be sharp.
- Some photographs need blur to indicate movement or a dreamy atmosphere, this is different from being out of focus.

Come to the Basic Image Processing workshop Sat 10th Dec



Preparing a print for a Club competition – Top Tips

- The way it is presented (mounted) should enhance and not detract from the print.

See Rob's ideas about mounts later in this section



Maximising quality in printing

- Image needs to be properly tuned in Photoshop/Lightroom or Affinity beforehand
 - Correct brightness
 - No colour casts
 - Suitably sharpened

- **Come to the Basic Image Processing workshop Sat 10th Dec**



What you have to do to print

- Choose aspect ratio (Crop) for print (may be different to paper size)
- Choose colour space/profile for printer/paper combination
- ***Select output format (TIFF or PDF)***
- Size to ensure Output density is 300ppi
- For Bognor Regis Camera Club competitions:
 - Prints need to be a minimum of 226 sq cm mounted on a card with a maximum size of 50cm x 40cm.

The Ricoh 7100 at PrintShop Chichester Uni





Sizing for printing

- As with PDIs it's better to resize an image to meet the final print size using some principles:
- Printing looks pixelated if the density is less than 200ppi
 - So a 10"x8" print needs $(10" \times 200\text{ppi}) \times (8" \times 200\text{ppi}) = 2000 \times 1600$ pixels
 - The RICOH machine at the Chi PrintShop prints at 300ppi so that would be $(10 \times 300) \times (8 \times 300) = 3000 \times 2400$ pixels (for a 10"x8" print).
 - If you want to "go Large!" then an SRA3 image (45cm x 32cm) needs 5315px x 3780px to print properly



Page set-up for RICOH C7100

- Paper size eg Anything up to SRA3 (450mmx320mm)
- Paper is always same size (SRA3)
- Printer expects to see 300 pixels per inch (PPI) density
- Printer expects Adobe RGB (ARGB) colour space
- Printer takes JPEGs or TIFFS or PDFs
- Printer much prefers PDFs as they are assured that the image is the correct size (@300PPI)
- Printshop paper recommendations (all are 300gsm) and SRA3 in size with as many images on as you want!
 - Gloss white “Finess 300gsm Gloss” - £0.48 per sheet
 - Silk white “Finess 300gsm Silk” - £0.48 per sheet
 - Uncoated (matt) “Elements Fire 300gsm – £0.60 per sheet

LR “Export” converts eg RAW file to something to Print



- File Settings
 - TIFF, Color Space = Adobe RGB, Bit Depth = 8 bits
- Image Sizing
 - **Resize to fit** -> Use the “Long Edge” (L or W) and make that what you want your print to be, eg 28cm (A4) or 38cm (A3)
 - **Resolution** -> 300 pixels per inch (What the printer needs)
 - Equates to 118 pixels per cm
 - These parameters will export and enlarge image to meet size and density requirements if necessary
- Output Sharpening
 - **Sharpen for** -> Glossy Paper
 - **Amount** -> Low or Standard (don't oversharpen!)

Complete Export parameters for Lightroom



- **Add to catalog** (to see what you have done)
- **File Settings:**
 - Image format -> TIFF
 - Color Space -> AdobeRGB
 - Bit Depth 8 bits
- **Image sizing:**
 - Resize to fit -> Long Edge
 - Units are cm or in (not pixels)
 - Resolution 118 -> Pixels per cm
 - Gives equiv of 300PPI
- **Output Sharpening:**
 - Sharpen for -> Glossy Paper
 - Amount -> Low

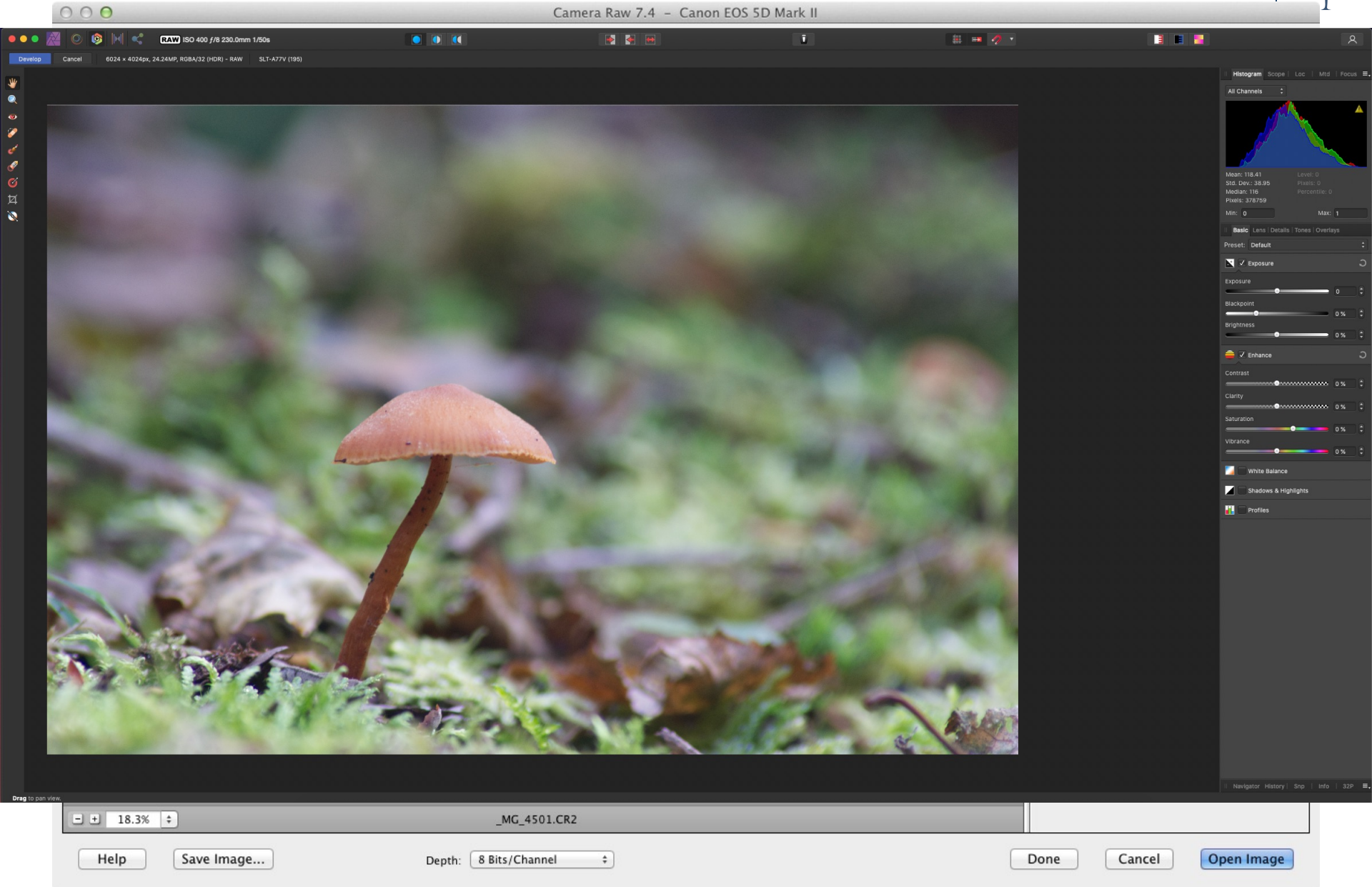
The screenshot shows the 'Export One File' dialog box in Adobe Lightroom. The 'Export To' is set to 'Hard Drive'. The 'Export Location' section shows 'Export To' as 'Choose folder later (useful for presets)', 'Folder' as '(folder will be chosen after you click the "Export" button)', 'Put in Subfolder' as 'No', 'Add to This Catalog' as 'Yes', 'Add to Stack' as 'Below Original', and 'Existing Files' as 'Ask what to do'. The 'File Naming' section shows 'Rename To' as 'Filename', 'Custom Text' as 'Example: _DSF3243_4Dec17 ARGB.tif', 'Start Number' as '1', and 'Extensions' as 'Lowercase'. The 'Video' section shows 'No Video'. The 'File Settings' section shows 'Image Format' as 'TIFF', 'Compression' as 'None', 'Color Space' as 'AdobeRGB (1998)', 'Bit Depth' as '16 bits/component', and 'Save Transparency' as 'No'. The 'Image Sizing' section shows 'Resize to Fit' as 'Long Edge', 'Don't Enlarge' as 'No', 'Long Edge' as '28.000 cm', and 'Resolution' as '118 pixels per cm'. The 'Output Sharpening' section shows 'Sharpen For' as 'Glossy Paper', 'Amount' as 'Low', and 'Sharpen For' as 'Glossy Paper'. The 'Metadata' section shows 'Include' as 'All Metadata', 'Remove Person Info' as 'Yes', 'Remove Location Info' as 'Yes', and 'Write Keywords as Lightroom Hierarchy' as 'No'. The 'Watermarking' section shows 'Watermark' as 'C Dailyshotz 2017'. The 'Post-Processing' section shows 'After Export' as 'Show in Finder' and 'Application' as 'Choose an application...'. The 'Cancel' and 'Export' buttons are at the bottom right.

Using Affinity Photo to prepare & print your image



- Similar to Photoshop needs doing in three stages
- After image is finalised:
 - Crop image to appropriate aspect ratio (to fit in the aperture)
 - Resize image to correct dimensions in mm (or inches) at 300dpi (see later)
 - Export image as a PDF

Affinity Photo in Develop Persona

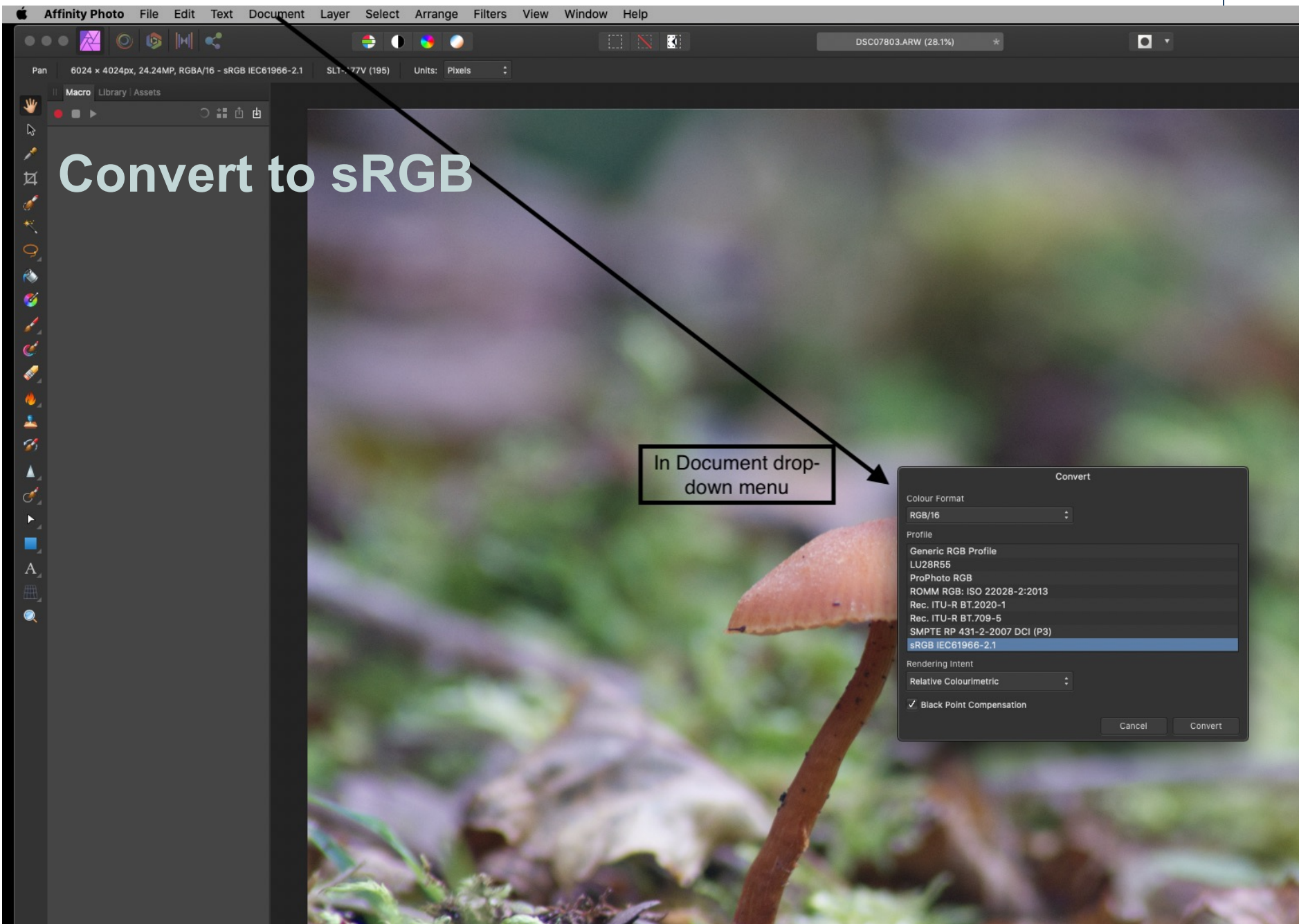




Cropping your image in Affinity Photo

RATIO

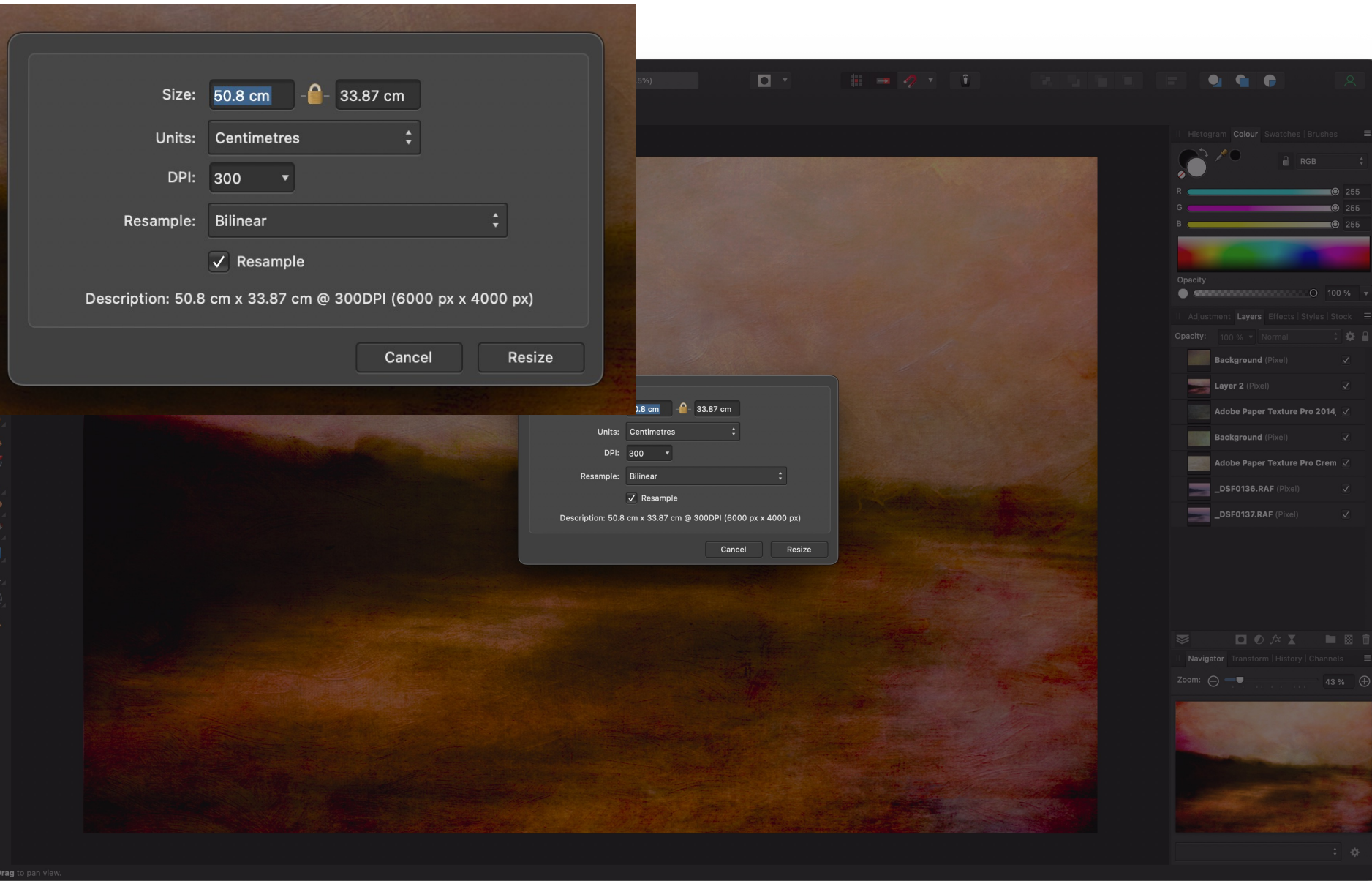
ACR
CROP



Affinity Photo Resize image to final size and DPI



Document->Resize Document



Export as a PDF (ensures size and DPI etc)



File->Export and choose PDF. Make sure Tab is set to PDF,->PDF (for Print) 300DPI

Export



PNG



JPEG



GIF



TIFF



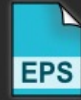
PSD



PDF



SVG



EPS



EXR



HDR



TGA

Preset: PDF (for print)

Raster DPI: 300 (Some areas will be rasterised)

☐ Include bleed

☐ Preview export when complete

Area: Whole document

☐ Don't export layers hidden by Export persona

Estimated File Size: Calculating...

Cancel

More

Export



Ordering a print

- When you “export” do it to a new folder with a sensible name eg “R Crocombe Print ddmmyy”
- Things you must specify to PrintShop or results are not guaranteed
 - What Paper to print on eg **Finesse 300gsm Gloss**
 - Paper used is always SRA3 (450mm x 320mm) whatever size print is
 - **Do Not Resize** (Export at 118ppcm or 300dpi creates correct size)
 - **Centred** (image on paper) This gives the white space round the image
 - Below is what I send to Printshop in the body of the email:

Would you kindly print the following image **centred on a sheet of Finesse 300gsm Gloss**
Image is **prepared at 300 ppi so please do not resize,**

Or use Wetransfer with this message associated with the image



Sending prints off to Printshop

- After checking your “exported” image
 - ARGB, less than 45cm x 32cm, at least 300ppi
- Log onto WeTransfer.com
- Enter name of the printshop at Chi Uni as recipient
 - printshop@chi.ac.uk
 - Enter your email address
 - In the body of the email being prepared:
 - Specify which paper to be used, what size paper you want the images printed on, centred, do not resize
 - How many images there are to print
 - Upload the image file (if one) or folder (if several)
- Wait 48 hours for a response (under normal conditions)

Bognor Regis Campus map

Learning Resource Centre 24 Main Reception

Otters Restaurant 17

The Hub - Students' Union 18

Accommodation Office 09

The Dome 32

The John Parry Centre 25

Business Incubation Centre 28

St Michael's House 33

The Theatre 27

Music Studio 2 and Mini Gym 19

The Chapel - Reprographics 22

Music Studio 1 23

Mordington House 31

The Lodge - Caretaker and Security 34

Pavilion 37

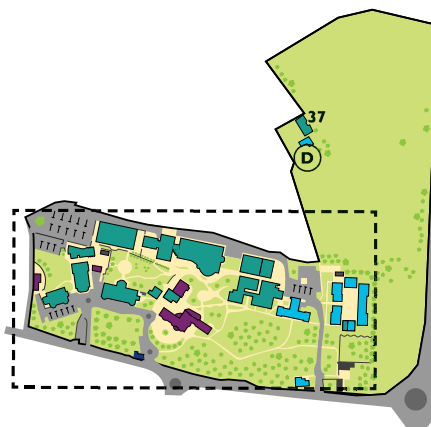
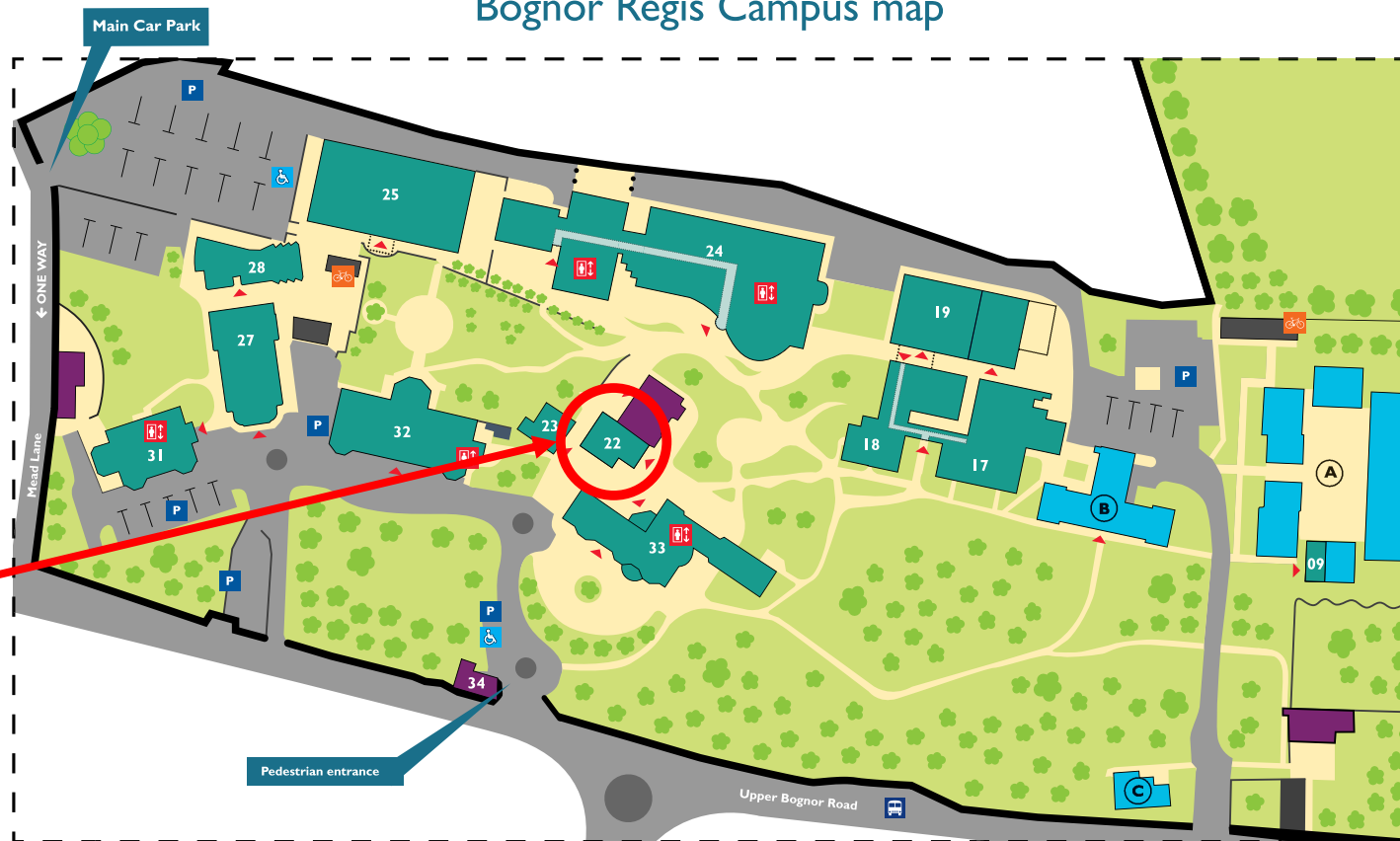
HALLS OF RESIDENCE

Barbara Smith Halls of Residence A

Longbrook Halls B

Charlotte House C

Pavillion Bungalow D





Printshop also print canvas

- For larger pictures (than SRA3) Canvas can be a good way to get images printed by Print shop.
- 20" x 16" printed and mounted £40 inc vat (commercial around £44)
- 40" x 20" printed £18 (commercial around £50)





Apertures

- How big a hole in the mountboard do you want/need?
- Too big?
 - Surround is too thin to separate image from edge
- Too small?
 - Image is lost in mount
- Artistic decision but here are some pointers:
 - Some images are square by nature
 - Some images are panoramic
 - Better to crop image (with frame) than to leave dead space
- Making mounts reusable lowers cost of entire process
- I use four different aperture sizes and can always fit my images within one of them!
- I print images 1cm larger than mount aperture



I now use Cotswold Mounts

- I have 4 different **aspect ratios** (to match 3 different apertures)
 - “7x5” (-> 1.362:1)
 - “16x9” (-> 1.73:1)
 - “Panorama” (2.013:1)
 - Square (1:1) Prints to 20cm x 20cm
- These parameters are stored as presets in Lightroom
- I purchase A3+ paper and always print 2 images to the same sheet (2cm bigger than A4) (could use SRA3 equally)
- Aperture size is 1cm smaller than print to ensure overlap

Cotswold Mounts order Double white mount Snow white, White core 50 x 40 cm

Picture ratio (rough)	LR crop ratio	Aperture lgth	Aperture hght	Print Lgth	Print hght
5x7	1.362x1	31	22.5	32	23.5
16x9	1.7297x1	31	17.5	32	18.5
Panoramic	2.013x1	31	14.9	32	15.9
1x1	1x1	19	19	20	20



Using this re-use approach with Printshop

- Max paper size is 32cm x 45cm
- My max print size (“aspect ration 5x7”) is 32cm x 23.5cm (aperture is 1cm smaller)
- Next one is (“Aspect Ratio 16x9”) 32cm x 18.5cm
- Next one is (“Aspect Ratio 16x10”) 32cm x 15.9cm
- Last is 20cm square image

This summary is expanded in other workshops



- Affinity Photo intro 8th Oct
- From Camera to Competition 26th Nov
- Printing from Smart Phones 18th Feb 2023
- Affinity Photo Printing 18th March 2023
- I will also also running an Intro to Lightroom printing (6 workshops) for the RPS

13-Aug-22 Field trip to explore the Basics of Composition

On Location Bosham

24-Sep-22 Getting to Grips with Your Camera

St Mary's small hall

08-Oct-22 Affinity photo intro

On Zoom

12-Nov-22 Photoshop to Affinity Photo migration

On Zoom

26-Nov-22 Basic Post processing

St Mary's small hall

03-Dec-22 Creating your own Christmas cards

On Zoom

14-Jan-22 Getting to grips with your camera: part 2

St Mary's small hall

28-Jan-23 Bubbles, Balloons, Drippers and dripping

St Mary's small hall

18-Feb-23 Smart Phone photography and printing from smart phones

St Mary's small hall

18-Mar-23 Affinity photo printing

St Mary's small hall

15-Apr-23 Introduction to Infrared

St Mary's small hall

13-May-23 Affinity photo advanced

On Zoom

10-Jun-23 Blend and layers morning

On Zoom



ANY QUESTIONS?
COME AND CHAT AFTER THE BREAK