

Four Colour Separation in Photoshop for photo screen printing

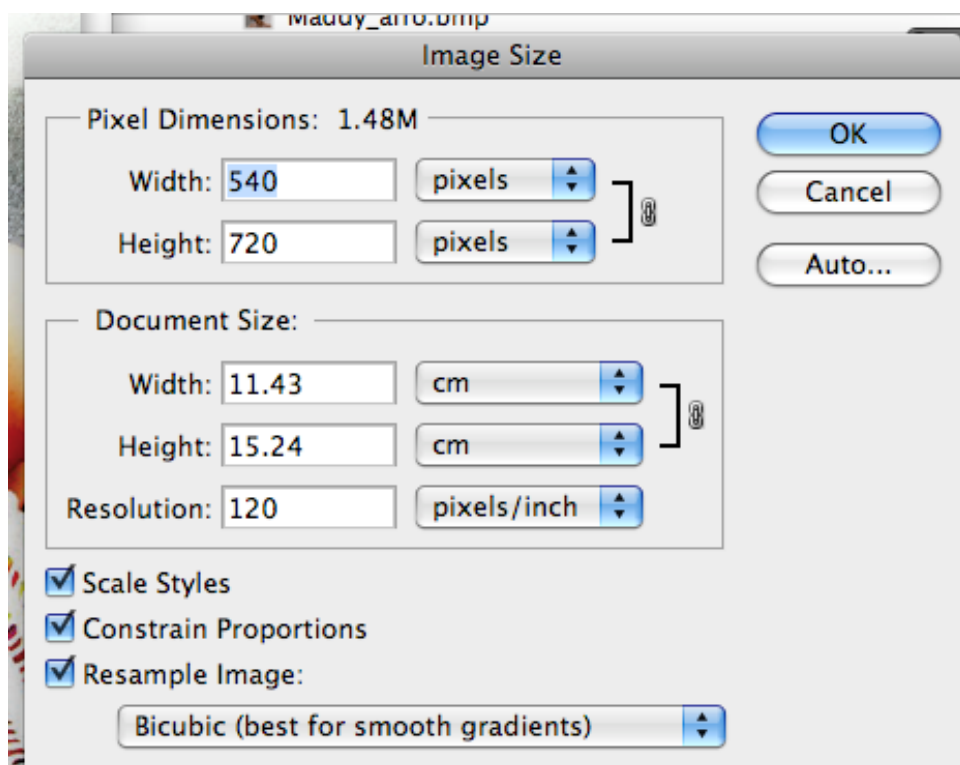
Your own photographs can be a good source of material for this. Resolution of 300 dpi is good to use for taking your own photographs. When you scan the photograph or alter the resolution in PHOTOSHOP this can be reduced to 120 dpi FOR A SMALL IMAGE.

A variety of image resolution works, from 72 dpi to 400 dpi and this will alter the final image. Low resolution can be used to creative effect.

For the workshop I received very small files (72 dpi) and very large files (300 dpi.) and 1,000 pixels across. These can all be used for different outcomes depending on the image and what you wish to print.

In Photoshop go to **Image -> Size**

This would work for a small image, as you see below 11 x 15 cm. More pixels would give a higher quality image.



The following detailed notes may be useful but I will provide the information I used for your work below this section

a. Scan resolution (ppi.), (dpi.), needs to be 1.5 to 2 times the final half-tone line count.

This rule is based on the final print out to be the same size as the scan.

If the scan is going to be enlarged, then you will need to scan at a higher resolution to compensate for the increased size.

If there is text or hard edge graphics, scan at a resolution of 200 to 300 dpi. To help the graphics print with a hard edge.

b.

If the final line count (frequency) is going to be 50 lpi (lines per inch) then the scan resolution can be to 100 ppi. (This only applies to half tones and not line art).

If the final print out is going to be enlarged 200% then the scan resolution should be 150 to 2000 ppi.

c.

If possible enlarge the scan when you do it. This may make the files large so have enough room on your back up.

PD Workshop procedure

Import jpg or png file into Photoshop.

Check overall size cm you wish to print out onto the transparency. A4 may be good for beginners.

Apply Unsharp Mask. Photoshop go to Filter -> Sharpen -> Unsharp mask

Use 75%, 1 pixel radius and Threshold of 3.

[This sharpens the image.]

Convert Image to CMYK.

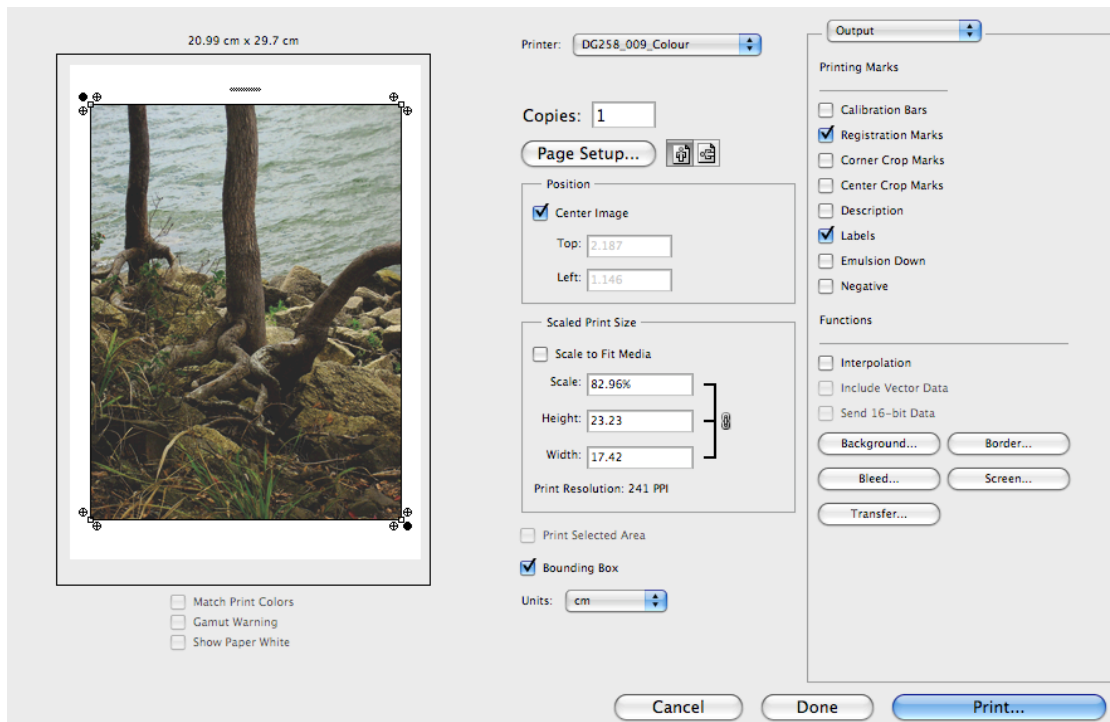
Image -> Mode -> CMYK

Show Channels.

Window ->

√ Channels

When printing you need to select one colour separation at a time by turning off the eye from the channel window, go into printing options.



Then under the Output section as above on the right, select

✓Registration Marks and

✓ Labels

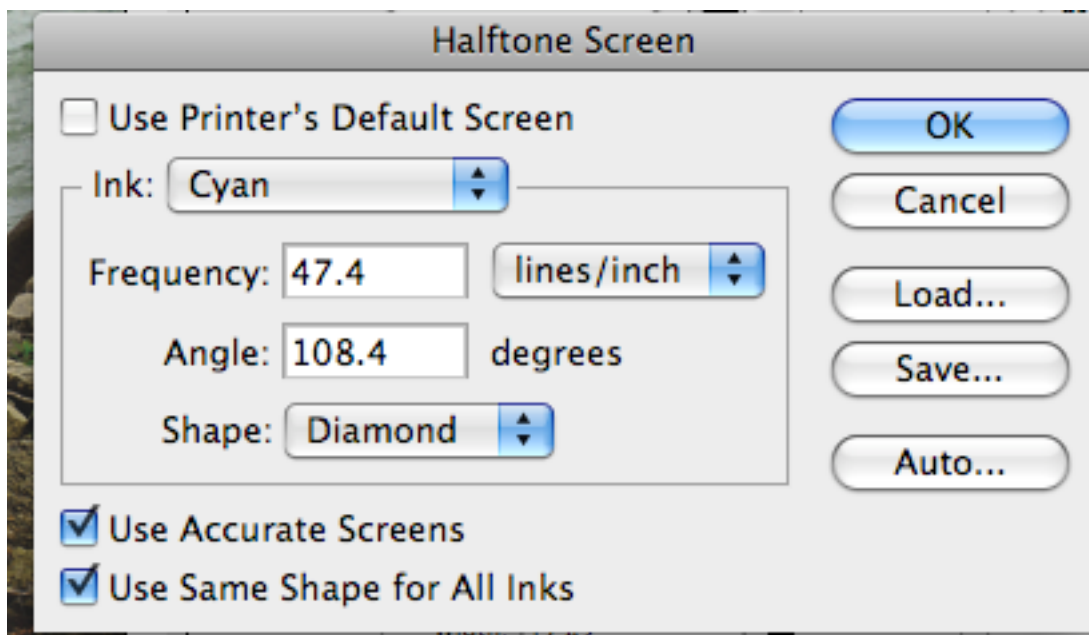
Click on Screen on the lower right.

Screen.

Remove the ✓ from the Printer's default screen and place the ✓ on

✓ Use accurate screens and

✓ Use same shape for all inks.



By now you are ready to print this onto white photocopy paper or straight onto the transparency film or OHT if this can be black enough.

Printing on paper and copying it onto transparencies may save some resources.

Each colour separation C M Y K stands for Cyan Magenta Yellow and Black.

Remember we didn't always print all of these from the screen. You can play with the process and just print a cyan and magenta and still get good results.

I hope this helps and you enjoy more experimentation,
Anne.