Resizing digital images for club presentation via digital projector.

This is a simple tutorial designed for versions of Photoshop 7 and above. Those using Photoshop Elements will be able to follow the tutorial as there are separate boxes detailing the methods required.

It is assumed you have processed your image to the desired state ready to be resized for viewing via the digital projector and that the file is now in tif or jpeg format.

Open your image.

Go to IMAGE/Duplicate as in Figure 1. Click on **Duplicate** and a new dialogue box will open as shown in Figure 2. **For Photoshop Elements follow this same procedure for this first step.**

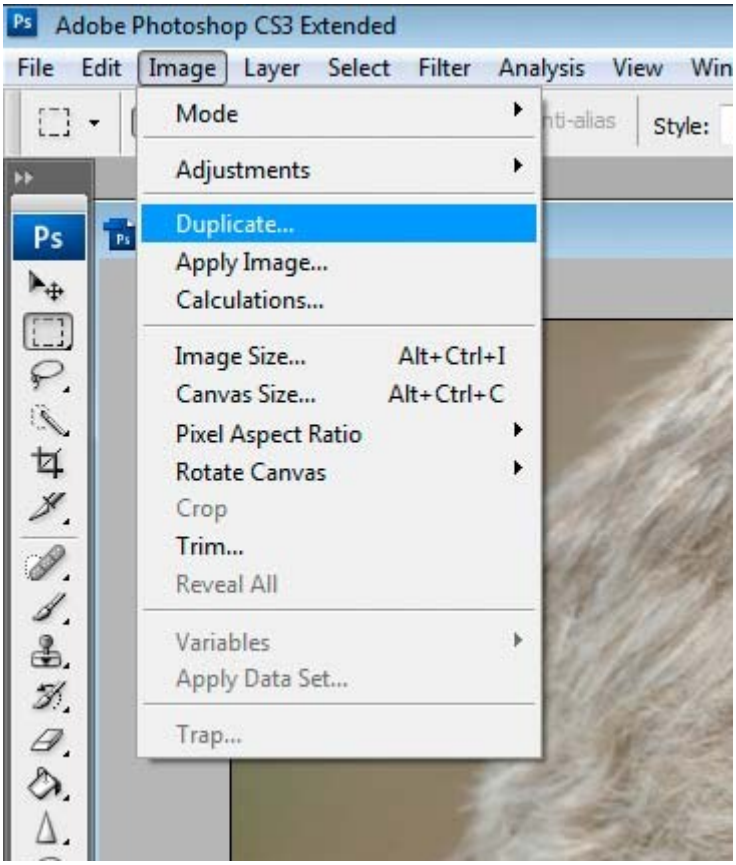


Fig. 1.

There is a convention you will need to follow for naming your entries for digital projected images. It is easiest to name your image at this stage following the convention. All file names must start with the Section you are entering, that is, **O** for Open, **S** for Set Subject or **C** for Creative. Then the actual title of your image followed by your initials. In total you must have 32 characters or less. In the example shown I am entering it in the open section so the correct procedure is -

Oahlovekp.tif where O is for open, the title is Ah love and KP are my initials. Click OK when done.

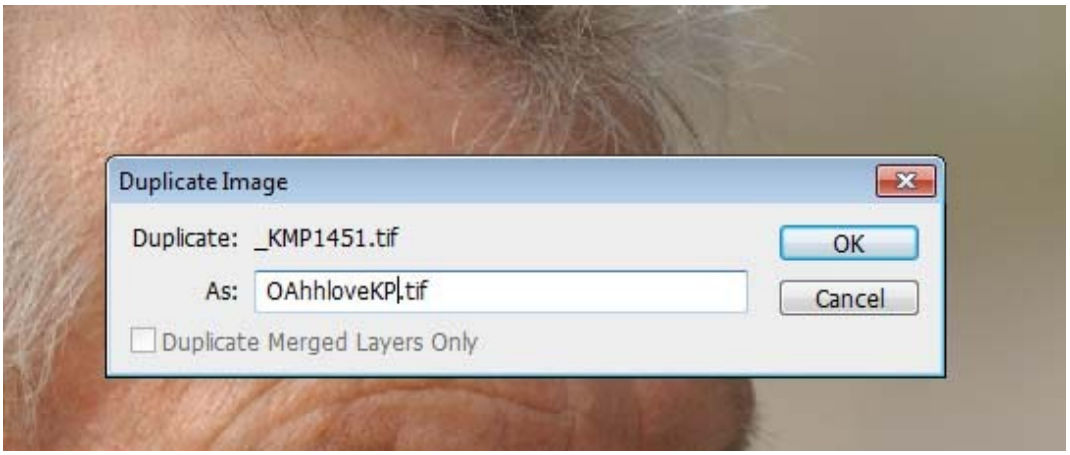
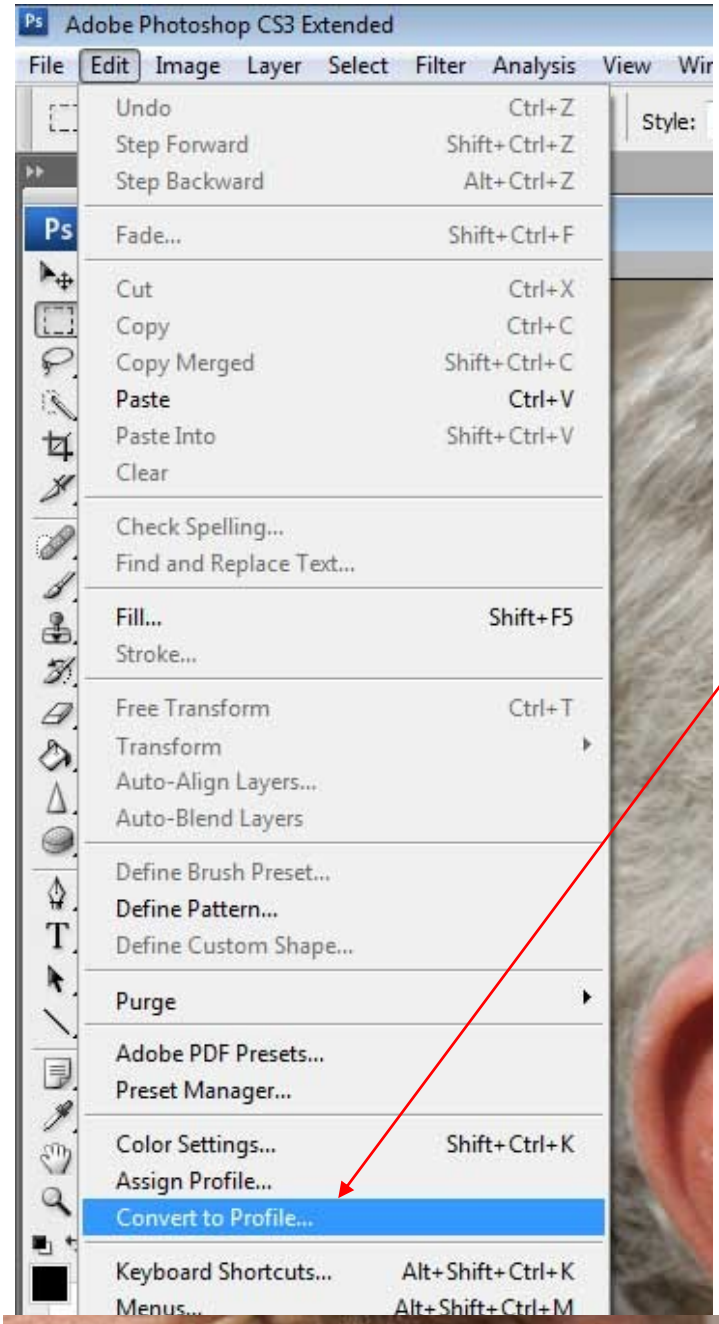


Fig. 2



All images displayed on the WEB or digital projectors are best viewed with an embedded colour profile of sRGB. This will ensure that the colours displayed are like those you see on your monitor at home and not dull flat and lifeless. To embed the sRGB profile you need to go to EDIT/Convert To Profile as seen in Figure 3.

Photoshop Elements users see blue box next page for directions on this step.

Fig. 3.

Figure 4 shows the dialogue box that opens.

The **Source Space** will show the profile of your image or the working space of Photoshop, this is not critical for our purposes. The **Destination Space** is the important area. Click on the arrow to the right and select the colour profile as shown. The other boxes below in the Conversion Options should be selected as shown. If your Source space shows as sRGB still follow this step to ensure that the sRGB profile is embedded in your image and not just worked in a sRGB work space.

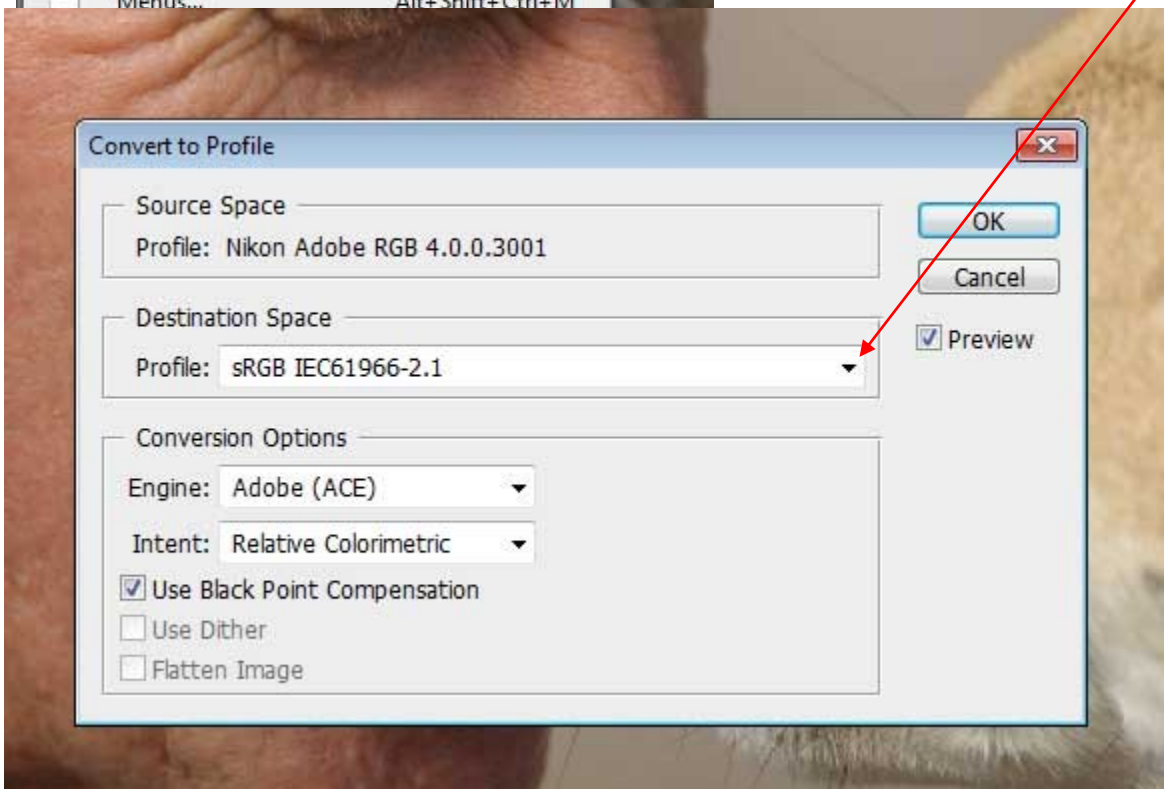


Fig.4

If you are using Photoshop Elements then you will need to follow these steps. In Photoshop Elements 7 and above go to IMAGE/Convert Colour Profile and choose: Apply sRGB Profile.

Next we need to do the actual resizing. **If using Photoshop Elements go to next page for resizing details.**

All landscape orientation images must have a width no greater 1024 pixels and height no greater than 768 pixels . Portrait orientation images must be no longer than 768 pixels. Resizing large files needs to be done with care to avoid digital artifacts. It is best to do this in two steps to over come compression and file degradation. Go to FILE/Automate/Fit Image as shown in Figure 5.

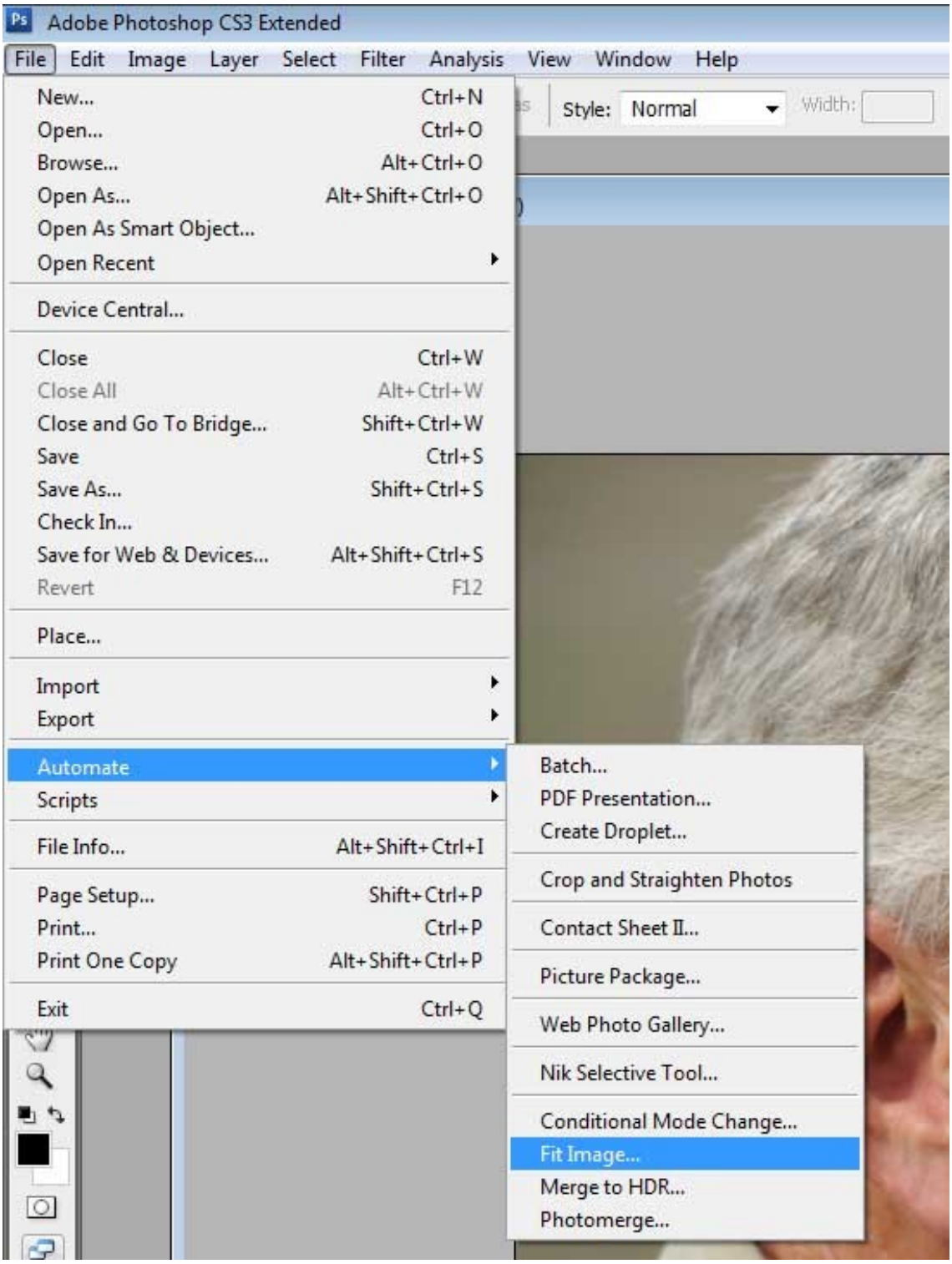


Fig. 5

Figure 6 shows the dialogue box that opens.

Type in 2500 pixels for both width and height and click OK. Photoshop will now resize your image to fit within those dimensions but will **keep the ratio of your image**. It does not matter if your image is Landscape or Portrait orientation for this step.

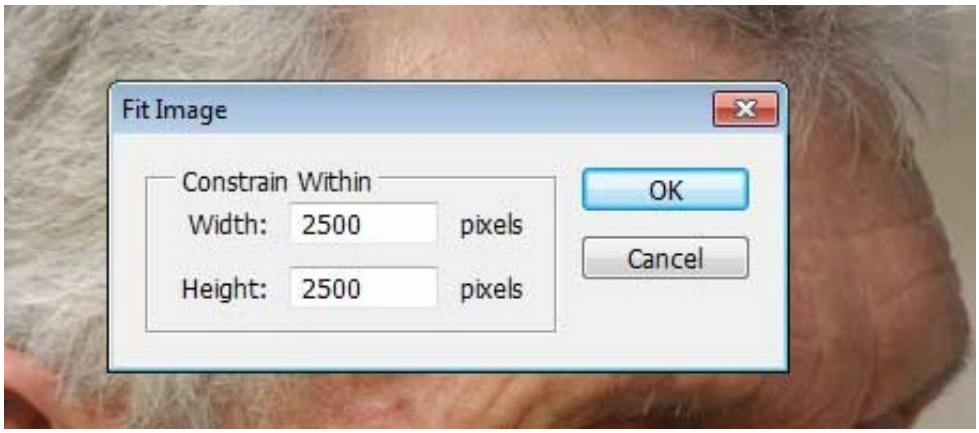


Fig. 6

You now need to repeat this by opening a new dialogue box via FILE/Automate/Fit Image. This time you need to type in the final pixel size required for width, 1024 pixels and height of 768 pixels. Once again it does not matter if your image is landscape or portrait orientation as Photoshop with keep the ratio of your image but restrain the file to the desired dimensions. This automated procedure with not degrade the image and Photoshop has built in a sound sharpening algorithm to cope with the down sizing. Further, Photoshop will automatically resample the image but will keep the existing resolution, that is 240 or 300 dpi. Click OK.

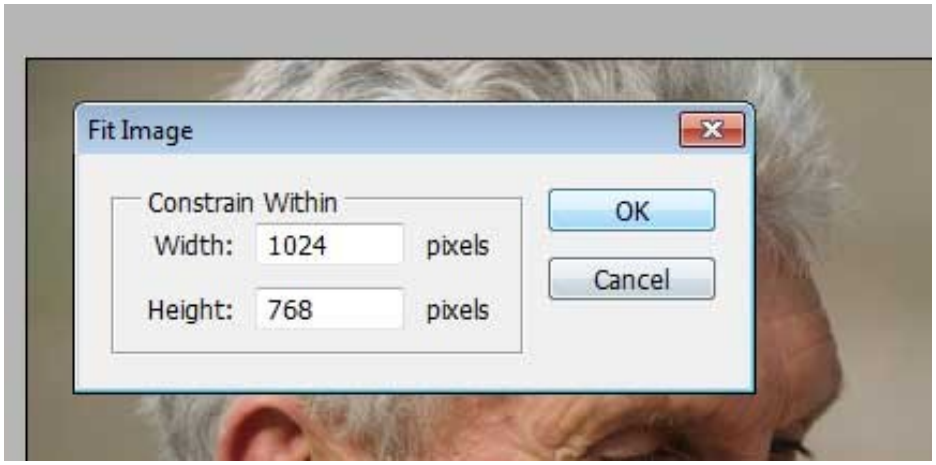


Fig. 7

Resizing with Photoshop Elements

Go to Image/Resize/Image Size. Make sure that Resample Image is checked.

In the dialogue Box for width type 2500 pixels and the height will automatically scale to suit. Leave the resolution at 240 or 300 dpi depending on your camera model.

In the bottom field select “Bicubic Sharper” as this is best for reducing images. Click OK.

Repeat this via Image/Resize/Image Size and this time type the final image size required. For landscape images put 1024 pixels in the width and check that height is 768 pixels or less. For Portrait images put 768 pixels in the height. All other settings should be the same as in the first step. Click OK.

After downsizing digital files it is standard practice to apply some sharpening to restore critical sharpness for final presentation. This is done before the file is saved for the final time. **Those using Photoshop or Elements can follow this step.**

Go to Filter/Sharpen/Unsharpmask. A dialogue box will open as in Figure 8. Make sure 'Preview' is checked.

Adjust the **Amount** to 75%. The **Threshold** to 0 and the Radius to 1.0 pixel. Examine the image in the preview pane, place the cursor over this pane and click on and off to see the sharpening effect. The cursor should become a hand when you place it over the image pane. If there is too much sharpening reduce the Radius till you are happy with the results.

Click OK when done.

The image should now look naturally sharp and will project well with good colour and contrast.

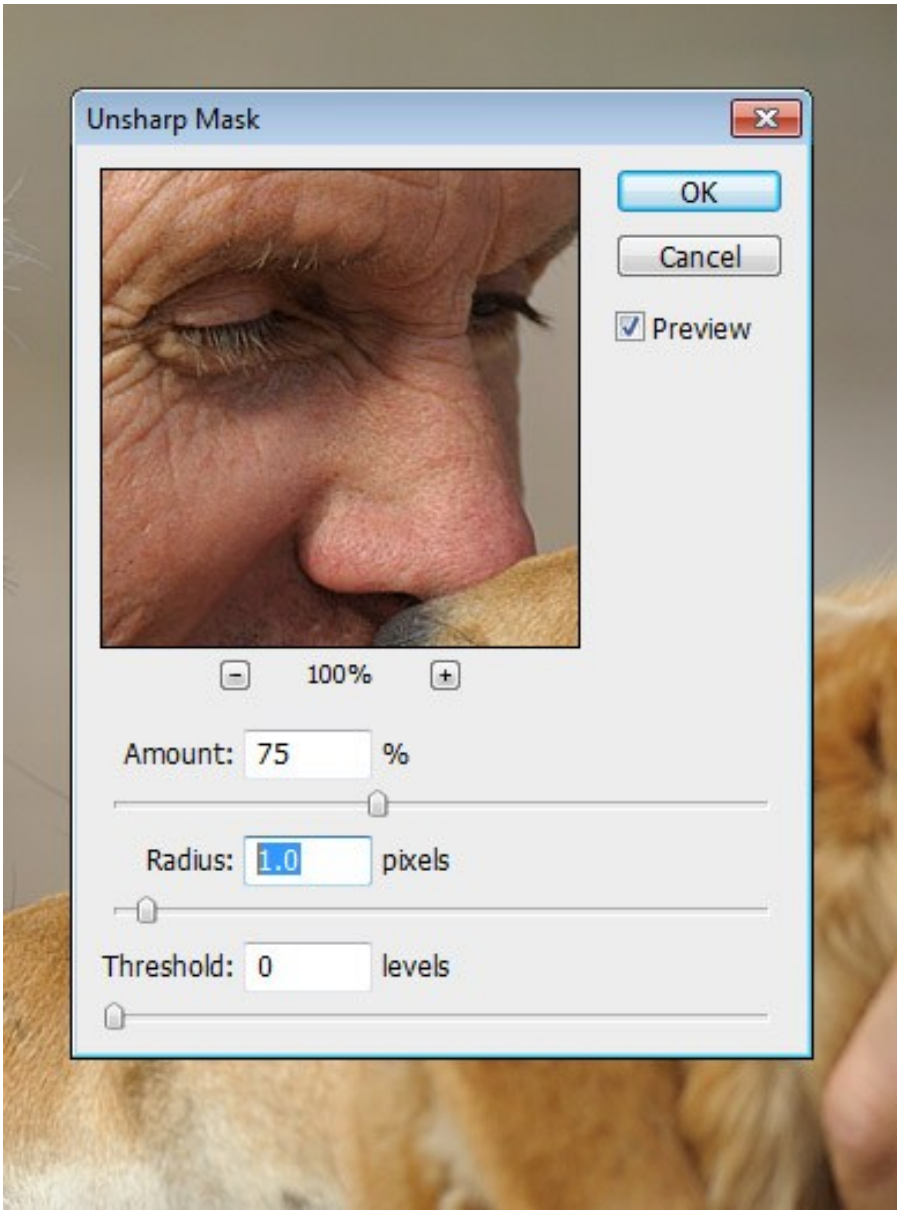


Fig. 8

We are now ready for the final step to save the prepared file for electronic display.

Photoshop and Elements users should both be able to follow this step.

If your image is in 16 bit tif file format you will need to go to IMAGE/Mode and select 8 bits channel before you can save as a jpeg image.

Go to FILE/Save.

In the dialogue box check that the File Name is correct and follows the convention as detailed in Step 1. My file is entered in the Open section so it is named **"oahlovekp".** It is a tif file so you need to move to the right in the Format box and click on the arrow. Now scroll down till you see jpeg and click on that. If your file is in jpeg format you will not need to do this step as it will already show as a jpeg in the format area.

In the bottom area is a box labelled **ICC Profile. Tick that box and check that the profile is sRGB with a string of numbers after it.** Click SAVE.

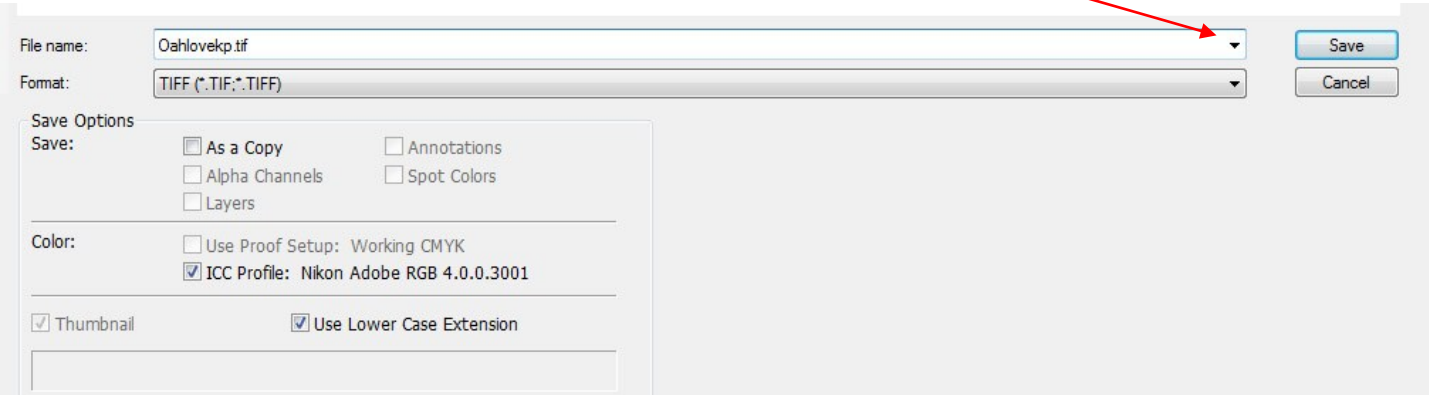


Fig.9

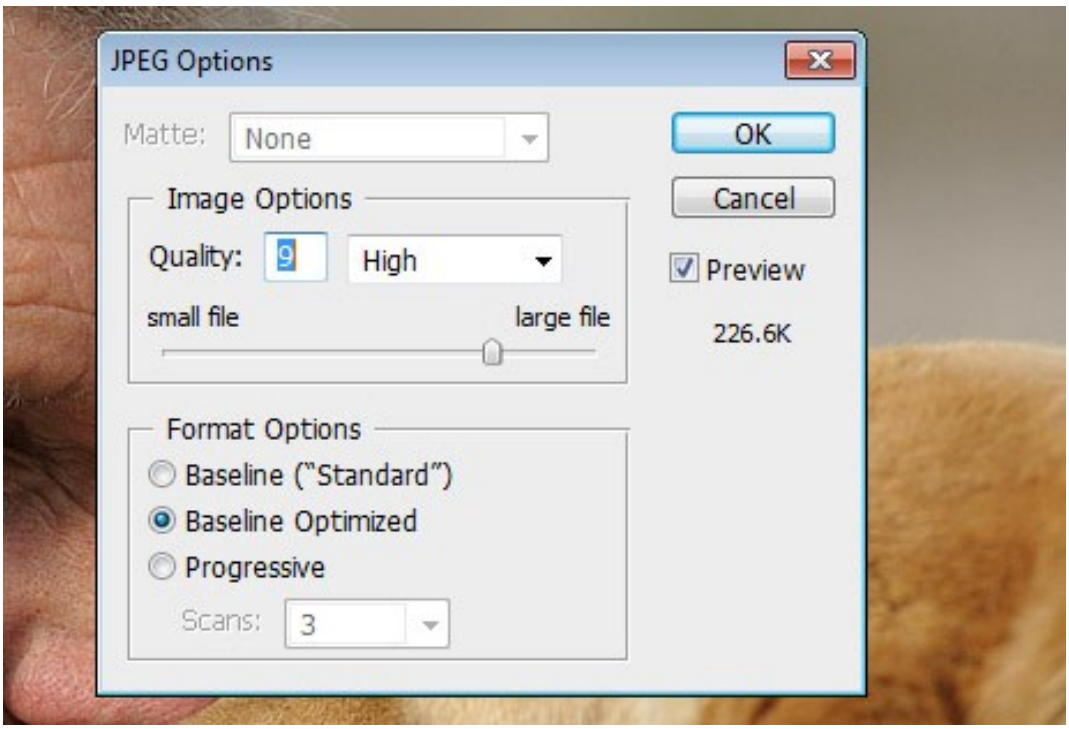


Fig.10

A JPEG Options box will now open. In the lower area make sure you have the **Baseline Optimized** radio button checked. Adjust the slider till the file size is less than 300k but keep the k's as close to 300 as you can for good image quality. Click OK.

All that is required now is to save the file to Flash stick ready to hand to the Digital Coordinator. Plug in your flash stick. Go to File/Save As and when the box opens double click on **My Computer** in the left panel. Look for the name of your Flash stick, double click on that. Create a new folder for Club Images. Double click on that, then click Save. The same JPEG Options box will open giving you a chance to check all the file details and size before saving to the flash Stick.