



Ely Photographic
Club

PHOTOSHOP BASICS FOR PHOTOGRAPHERS

Going from Lightroom to Photoshop

Carry out your normal post processing in Lightroom.

If you don't intend to carry out sharpening in Photoshop then do your normal sharpening in Lightroom before moving over to Photoshop.

If you intend to do the sharpening in Photoshop then don't do any in Lightroom otherwise you end up with double sharpening and it can look over sharpened. This document doesn't include anything on sharpening in Photoshop as there are several methods available together with various "Plug-Ins" so this will be in a separate document.

Opening Photoshop

In Lightroom with the photo selected and shown in the Loupe View, Right Click on the image and a menu will pop up.

Go to "Edit in" and a sub-menu will appear and select "Edit in Adobe Photoshop 2020" (or whatever version you have), which will be the top item. The selected photo will open in Photoshop.

You can get to the same place using the Main Photo Menu on the top menus, then "Edit in" and a sub-menu will appear and select "Edit in Adobe Photoshop 2020".

You can open Photoshop directly from desktop and then use "Open" button to browse but it's better to go from Lightroom to keep your images in the same place so when you save in Photoshop the photo automatically goes back to Lightroom and appears next to your original photo but with a Tiff file tail.

When working in Lightroom the photo may have been a RAW file but when it moves over to Photoshop its no longer a RAW file.

After you have carried out your Photoshop adjustments just go to the "File" menu on the top line and select "Save" and your photo will be saved and it will save it as a Tiff file back in Lightroom to the left of your original photo. Don't use "Save As" or change the file name just use "Save".

If you want to carry out some more Lightroom edits you can.

Then if you want to go back into Photoshop just repeat the steps above but when you say open in Photoshop a dialog box opens with three selections. If you want to get back to your Photoshop layers etc select "Edit Original".

If you have carried out some Lightroom adjustments since coming out of Photoshop that you don't want to lose or you are working on a JPEG, select "Edit a Copy with Lightroom Adjustments" and a copy will be made as it transfers and your second set of lightroom adjustments will be retained but the image layers will be flattened so it will appear as a single layer in Photoshop.

Setting up Lightroom Preferences to ensure the files transfer correctly

Under the "Edit" menu in Lightroom select "Preferences".

Go to "External Editing" and make sure the following is set: -.

File Format: Tiff

Color Space: ProPhoto RGB (This is the default but you could select Adobe RGB)

Bit Depth: 16 bits/component

Resolution: 240

Compression: Zip

Then close this.

Go over to Photoshop and go to the "Edit" menu and select "Color Settings". Then select "North American General Purpose 2". Leave the rest as the defaults. Then close this menu.

Layers

Layers are probably the most important part of Photoshop and how they can be adjusted is what makes Photoshop such a powerful programme.

To copy the current layer press Ctrl J. To create a new layer, click on the new layer icon on the bottom right.

As Layers is such a large and important part of Photoshop there is a separate document on this that goes into a lot more detail.

However, we need to understand the basics of layers to ensure you have a non-destructive workflow as it's better to carry out adjustments on a new layer rather than the original layer.

There are two ways to do this. The first is with the original layer selected (which it will be automatically when first opening Photoshop from Lightroom) press Ctrl J (Command J on a Mac). This will create a duplicate layer above the original and you can work away on this duplicate layer and if you don't like the result you can simply delete it and the original layer is still there.

The second method is to create a new layer by clicking on the new layer icon (the page with the bottom left corner folded back) on the bottom right next to the trash can, which will place a transparent layer above the original. Then any changes you make, such as with the Spot Healing brush, are on this new layer and the original layer is not changed. Ensure that "Sample All Layers" is ticked up near the top row so Photoshop can see the layers below so it knows what you are working on.

Using the Photoshop tools down the left hand-side

In the default layout all the main menu items are along the top, the “Tools” are shown down the left-hand side of the main viewing screen and the layers and adjustments are on the right-hand side.

If you hover the cursor over a tool a description of the tool pops up.

Some tools have several types / options to choose from. Hold down the small triangle at the bottom right of the tool to open up the various sub-tools.

Each tool has a shortcut key and this is shown in () after the name of the tool. For example, B is the Brush tool and J is the Spot healing brush tool. However, this only opens the first brush in the list or the one you were using last. Use shift with the letter to scroll through the various sub-tools.

Each tool has a “Learn how” help button. Click on this and follow the tutorial which will show you how the tool works using an interactive guide.

A selection of tools that are commonly used

Move Tool (V)

Rectangular Marquee Tool (M)

Lasso tool (L)

Quick Selection tool (W)

Crop tool (C)

Spot healing brush tool (J)

Brush tool (B)

Clone Stamp tool (S)

Eraser tool (E)

Dodge tool (& Burn tool) (O)

Text tool (T)

Hand tool (H)

Foreground & Background colour (D to reset)

The letter in brackets is the key to press to bring up the tool rather than clicking on it. I give some brief information on the tools most commonly used in photography to remove distractions below.

If you make a mistake you can use Edit / Undo or Ctrl Z and this steps back once for each press. You can just keep pressing Ctrl Z to delete several errors. For a lot of steps back you could go to History Panel and select a point where you think all was ok and start again from this point.

Removing Distractions

This is probably, as a Photographer, the area of Photoshop you will use the most.

Always work on a new layer whenever you can. This ensures you can recover from any errors.

When using any of the tools make sure as noted above that “Sample All Layers” is ticked if using a new transparent layer.

Work in small pieces rather than a large area. This means stepping back with Ctrl Z only deletes the last small piece not a large amount of work. The tools sometimes work better when changing a small area rather than a large area. This is not always the case but it usually is.

The other reason is for example, if you had been carefully removing a long flower stalk and it was perfect until the very last bit. You either have to delete the whole thing or try to correct your error. If you have done this in small increments you can just delete the last one.

Content aware doesn't always work the first time. If it doesn't look ok step back and repeat until you are happy with the result or the result can easily be corrected using another tool. Alternatively, don't step back but just run it several times until you are happy. Content Aware has become much better in the more recent versions of Photoshop. However, it seems to do the fill differently each time so experiment.

To use Content Aware Fill, make a selection with say the Lasso Tool and then in the Edit menu select Fill which opens the Fill menu and you can select Content Aware Fill in the top box. On the newer versions of Photoshop, you have Content Aware Fill as a direct selection within the Edit menu and I use this.

A little more detail on four commonly used tools

Spot Healing Brush Tool & Healing Brush Tool

These work in similar ways. They work so much better than the same tool in Lightroom or Camera Raw.

If you are removing sensor spots it's ok to work on the original layer as it's very unlikely that you will ever want to bring them back. However, the textbook way is to create a new layer to do this but I have to say I very rarely do for sensor spots but I do for other types of corrections.

For spots not surprisingly it's best to generally use the Spot Healing Brush Tool. This brush automatically searches the surrounding area for its sampling. If using a new layer remember to have Sample All layers turned on.

As these are brushes you can click on the brush icon to change the settings. For spot removal have a 50% - 75% Hardness setting but you can experiment to see what works best. If the brush is too hard you may see the outline of the repair, too soft it may still show some of the spot and not blend in properly.

You can change the brush size in this brush menu panel but it's usually easier to use the [or] bracket keys.

Leave blend mode as Normal; Leave Type as Content Aware;

If the spots are hard to see try inverting the layer by pressing Ctrl I at the same time and it inverts the layer, sometimes making the spots easier to see. Ctrl I to flip back.

The difference with the Healing Brush Tool is you select the area to use to heal the imperfection by Alt + Click, i.e. holding down the Alt key when clicking (Option + Click on Mac).

This means you can be more selective in what Photoshop uses to heal the issue. You will see a crosshair showing where the brush is sampling from as you go.

Be careful not to let the crosshairs stray into other areas or off the edges of the photo. The crosshair will also see the original image below and will use this which may not be what you want. You can see the sample in the brush so keep a close watch on what's shown in the brush.

This means you may have to do this in very short strokes. Every time you release the mouse the crosshair returns back to its original starting point. You can re-select the sample point at any time to get the correct blend to the repair.

To avoid the crosshair returning to the original sample point you can tick Aligned Sample and the sample point will be linked to the brush even after releasing the mouse. This means the sample will be the same point away from the brush as the first selection. I personally don't use this feature very often.

Once finished you can reduce the opacity of the layer to make the corrections blend in a bit better or make them look more realistic. This is a good reason to use a new layer.

If the tool does not seem to be working make sure the layer is selected (not any mask) also make sure you haven't got Caps Lock selected on the keyboard because if you have you will only get a crosshair cursor not a circle. This also applies to the next tool the Clone Stamp Tool.

Clone Stamp Tool

The Clone Stamp Tool requires you to sample just like the Healing Brush Tool. Also, the sample is visible within the brush circle.

The Healing Brush Tool tries to blend the brush into the surrounding areas, whereas the Clone Stamp tool doesn't it just copies exactly what the sample shows.

Sometimes the Healing Brush Tool in trying to blend in creates some odd issues. This is when the Clone Stamp Tool is better as it just copies so you are in control of what the result is rather than Photoshop trying to guess what is required.

The Clone Stamp Tool also works better on edges or extending features. If you are trying to remove a mast from the top of a building when the healing Brush meets the building it tries to alter it as well often with odd results. The Clone Stamp Tool doesn't do this as it's not trying to blend in just copying pixels.

When using the Clone Stamp Tool vary the hardness of the brush for the various areas you are working on. For example, when getting close to an edge make the brush harder so it doesn't spill over onto the edge. You may then have to soften the brush to paint out any hard edges to the brush stroke.

The downside of the Clone Stamp tool is you have to be careful of the selection both in colour, tone, brightness, etc to get a good match. You can alter the opacity of either the brush, as you are using it or the layer itself to help blend in the change.

If you sample an angle of an edge you can change this angle in the Clone Source Panel, which is in the same location as the Brush panel just to the right and looks like a darker version of the Clone Stamp tool. This is also accessible from the Window menu.

The sample in the Clone Stamp Tool is actually the full image just clipped to the size of the brush and therefore you can manipulate it.

You can change the angle of the sample using the box below the W & H boxes by holding down the left mouse button and dragging left or right. When you do this the whole image is shown but when you let go it just shows the clipped sample in the brush. Enlarge the brush if you want a clearer idea of the angle of the sample.

It may be that once the edge has been dealt with you could swap to the Healing Brush Tool for the other areas.

You can sample from one open photo onto another open photo (i.e. two separate open documents) as the Clone Stamp Tool remembers the sample point.

Patch Tool

This is the third tool in the Spot Healing Brush Tool icon. Click and hold the little triangle on the tool icon until the list of tools appears and select the Patch Tool, which unsurprisingly looks like a patch.

If you had the Spot Healing Brush selected click Shift J twice to get to the Patch Tool. Shift J cycles through the group of these tools.

You click and drag a selection like the Lasso Tool then click and drag the selection to where you want the replacement to come from and release the mouse.

You have to deselect the selection by pressing Ctrl D (i.e. both keys at the same time) (Command D on a Mac).

There are two settings Normal and Content Aware and you can try both to see which works the best. Often Normal works best especially if there is a lot of texture as Content Aware tries to bring in some of the original area which can look very odd.

Normal has to be used on an original layer as it doesn't work on a new transparent layer. Content Aware does work on a new transparent layer so if you use Content aware on a new transparent layer make sure Sample All Layers is ticked. If you use Normal create a copy layer by pressing Ctrl J (Command J on a Mac) so the original layer is maintained just in case you want to go back.

There is a setting called Diffusion which works like feathering around the edges. Again, play around with the various values to see which blends the edges in best. A setting of 2 can work quite well in many cases but if you are working on a portrait it maybe that 6 works best here.

The Structure setting can be changed after the patch is in place but still selected. Select it and move the slider to see the impact. It generally gets looser the higher the number so 1 is the best place to start.

The Colour setting works in a similar way but with zero the best place to start.

The Use Pattern setting is usually best left as a White Square with a pattern running diagonally across it. Try the other settings to see the result.

The more recent versions of Photoshop have a box near the top where you can choose Source or Destination. These work in reverse.

If you select Source the area you initially select will be replaced by the area you drag the selection to. If you select Destination the area you drag the selection to will be replaced by the area you selected. I generally use Source.

Just a note that you could make a selection with the Lasso Tool and then select the Patch Tool and it still works on the selection.

Remember you can always use the layer Opacity slider to blend things in as well and this is the reason for doing things on a separate layer so you have this control as well as the various blend modes.

It's worth trying all four of the above tools (Spot Healing Brush, Healing Brush, Clone Stamp, Patch) to see which works best and it will probably be a combination of them to suit each situation.

Another quick point. If you want to go back to the original and discard all the healing, closing and patching just go to the File Menu and select Revert.

Adjustment layers

Generally

Select an "Adjustment layer" by clicking on the icon on the bottom of the layers panel.

There are a wide range of adjustments available, the most common two are listed below.

Brightness / Contrast

Click on brightness / contrast.

Then click "Auto" button. If results are not quite right adjust the sliders to suit.

Also, opacity can be adjusted by the % slider

Hue / Saturation

Select Hue / Saturation, then adjust in the same way as with the Brightness / Contrast adjustment

Other adjustment layers

Experiment with the other adjustment layers and you will find some work in a similar way to the tools in Lightroom. The advantage here is they are on a separate layer so can be manipulated separately.

Masks

There are two types of masks, Adjustment Layer Masks & Layer Masks

Layer masks

These are used on image or pixel layers.

When you create a new layer or copy an existing layer a mask is not automatically created.

To add a mask to a layer, click on the Add Vector Mask icon (a white rectangle with a black circle in the centre, in the bottom right).

The mask created will be white so everything on the masks own layer is visible and everything on the layer below is hidden.

On a normal white layer mask (which is the default position) painting on the mask with a black brush will conceal / hide the information on its own layer and expose the information on the layer below. If you go too far paint with a white brush to reinstate the white mask and this will reveal the information on its own layer again and hide the information on the layer below.

If you invert the mask by pressing Ctrl I it turns black so its own layer is fully concealed but everything on the layer below is revealed. Then you use a white brush to reveal information on the masks own layer and conceal information on the layer below.

The phrase “Black reveals / White conceals” is often used to describe this. However, this phrase applies to the layer the mask is associated with, NOT layers below. Therefore, the better way to remember this is “White reveals its own layer” / “Black conceals its own layer”. (i.e. White makes the layer visible, black makes the layer invisible).

Layers and masks are the most important things to learn about photoshop. It’s worth practicing on a couple of layers with a mask and painting on the layers with coloured brushes and then painting on the masks to see what happens. This is the best way to understand how layer masks work.

To hide things on the layer and reveal the layer below, select the mask to ensure the correct layer mask is selected and a white border will be around the mask thumbnail.

Select a Brush Tool from the tool menu on the left. Select a soft edge brush and size as appropriate on the options bar. The square bracket “[” makes the brush larger and the “[” makes the brush smaller.

Ensure black is on top on the two squares on the bottom of the tools panel. If not click on the bent double headed arrow to swap them (or press X to swap them around). If the foreground colour is not white or black click on the very small symbol to the left of the bent double headed arrow and they should revert to black and white (or Press D and it will revert to Black & White).

Then just paint over the image (not the mask) with the black brush to make this layer invisible and allow the layer below to show through.

If it's not working the most common mistakes are that the mask is not selected or you are using the wrong colour.

If you go too far change the brush to white and paint back over the black brush marks as this will reveal the change again.

You can reduce the opacity and flow of the brush to reduce the effect and blend it in.

Adjustment layer masks

When opening an Adjustment layer a mask is automatically created and opened with it.

On the right of each layer icon (when using adjustment layers) in the layers panel is a white square which is the "Mask" for this adjustment layer.

When using adjustment layers all the changes you make are visible on the layer below because the mask is white. Ctrl I will invert the mask to black so nothing of the adjustment shows though.

If you do not want the adjustment to be visible in selected parts of the layer below you need to turn these selected areas of the white mask black.

As noted above the standard rule is that Black on a White mask conceals the information on its own layer, therefore the adjustment on this layer is made invisible by the black brush.

Click the mask to ensure the correct layer mask is selected and a white boarder will be around the mask thumbnail.

Select a Brush Tool from the tool menu on the left. Select a soft edge brush and size as appropriate on the options bar. The square bracket "]" makes the brush larger and the "[" makes the brush smaller.

Ensure black is on top on the two squares on the bottom of the tools panel. If not click on the bent double headed arrow to swap them (or press X to swap them around). If the foreground colour is not white or black click on the very small symbol to the left of the bent double headed arrow and they should revert to black and white (or Press D and it will revert to Black & White).

Then just paint over the image (not the mask) with the black brush to stop the changes made by these adjustments affecting those parts of the image on the layer below this adjustment layer.

As before, if it's not working the most common mistakes are that the mask is not selected or you are using the wrong colour.

If you go too far change the brush to white and paint back over the black brush marks as this will reveal the change again.

You can reduce the opacity and flow of the brush to reduce the effect and blend it in.

This is just a brief look at Photoshop layers and masks and there is another document which goes into these in more detail.