

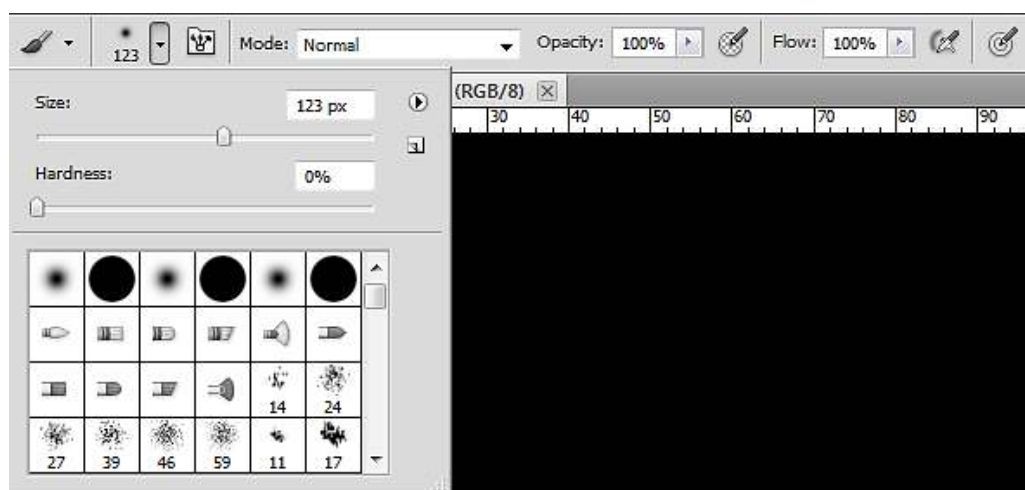
# 7 The Brush Tool & Brush Panel

## The Brush Tool

Having a good understanding of how the Brush tool works in Photoshop is essential. The same basic principles that are employed in the Brush tool work in a similar fashion for several other tools, such as:

- The Clonestamp tool
- The Healing Brush.
- The Spot Healing Brush
- The Colour Replacement tool
- The Mixer Brush
- The History Brush
- The Art History Brush
- The Eraser tool
- The Background Eraser tool
- The Blur tool
- The Sharpen tool
- The Smudge tool
- The Dodge tool
- The Burn tool
- The Sponge tool

Each of these tools will have different properties and options, but once you have learned how the brush tool works you will be able to control how these various tools are applied.

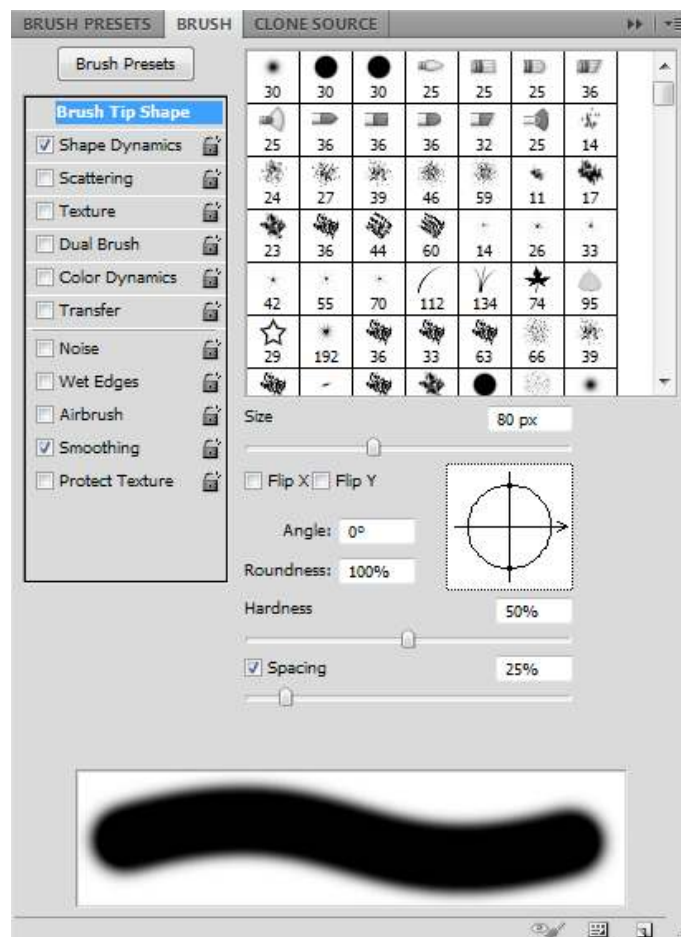


**Fig 7.1** the Brush tool Options panel and drop down menu

The key properties to understand about the Brush tool are available from the Options panel (fig 7.1) and include:

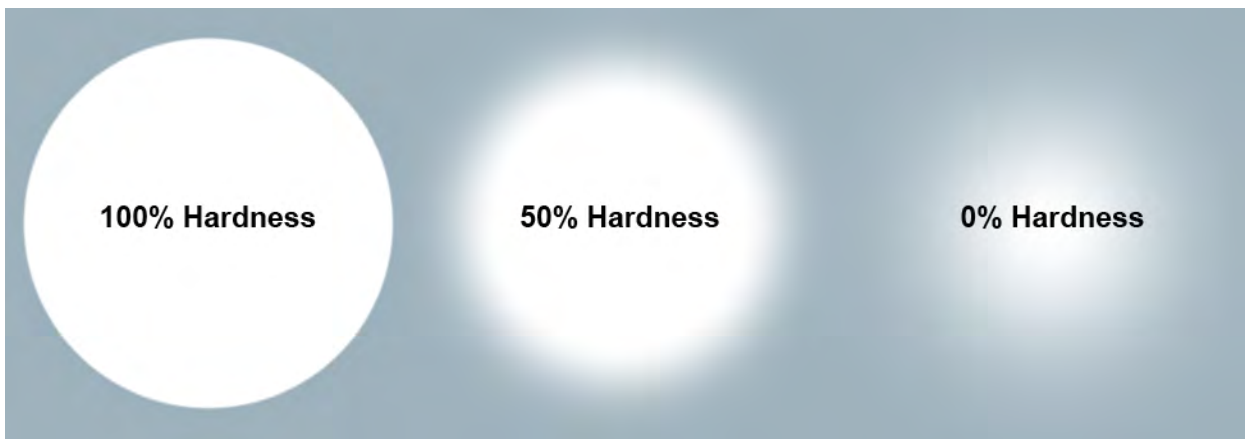
**Size** – the brush size is measured in pixels and determines the coverage the brush will have. Be aware that on older machines, using very large brushes can cause lag in the rendering of the brush stroke. There are several different ways to change the Brush size:

1. Click on the drop down menu in the Options panel fig 7.1, and then move the Size slider.
2. With the Brush tool active, hold down the Alt (PC) key and Right click. A preview of the brush will appear in red. Drag left to make the brush smaller and right to make it larger.
3. Pressing the left [ key will decrease the brush size and pressing the right ] key will increase the brush size. This is keyboard shortcut is very useful as you can change the brush size on the fly with you left hand whilst painting with your right (or vice versa).
4. You can also change the brush size from the Brush panel, fig 7.2 (more on this panel later).



**Fig 7.2** the Brush panel

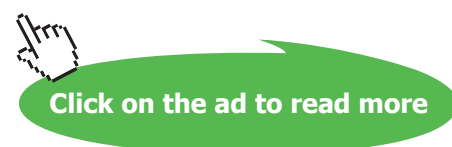
**Hardness** – this setting determines the softness of the brushes edges, fig 7.3.



**Fig 7.3** the same Brush size but with varying degrees of hardness

As with the Brush size, the Hardness setting can be changed in a number of different ways:

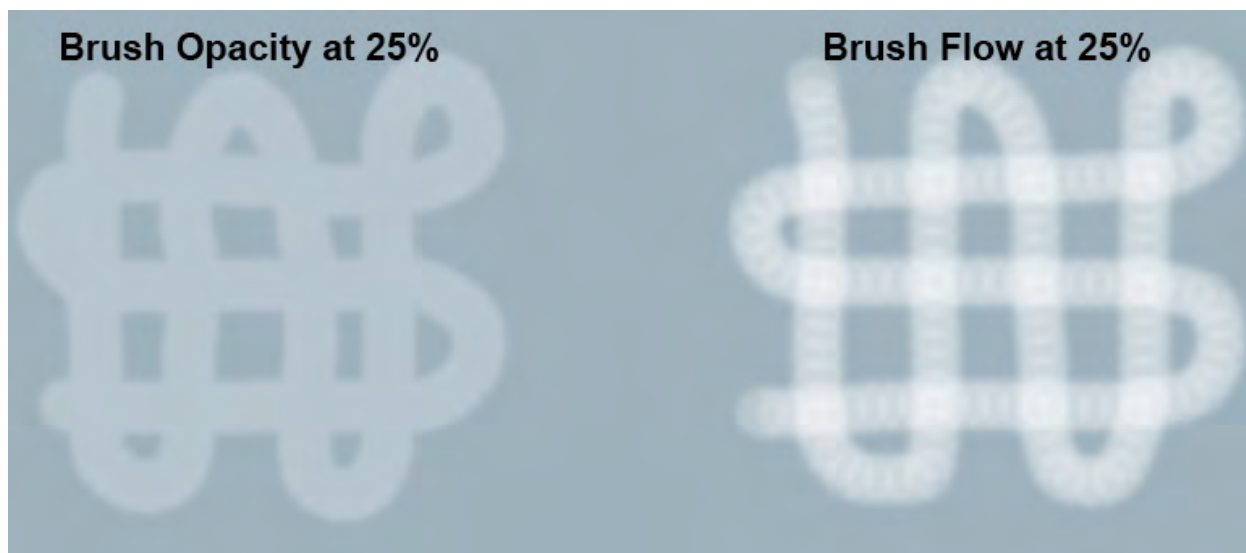
1. Click on the drop down menu in the Options panel fig 7.1, and then move the Hardness slider.
2. With the Brush tool active, hold down the Alt (PC) key and Right click. A preview of the brush will appear in red. Drag up to make the brush softer and down to make it harder.
3. Holding down the Shift key and pressing the left [ key will soften the brush edge and pressing the right ] key will harden the brush edge.
4. You can also change the brush Hardness from the Brush panel, fig 7.2.



Blending Mode – for an overview of the various Blending Modes see Chapter 5.

Opacity – this setting makes the pixels more or less opaque. Making multiple passes with a brush set to a low opacity will gradually build up the pixels opacity until they are 100% opaque.

Flow – at low Flow settings, the opacity of the pixels can be built up in a single pass, fig 7.4.



**Fig 7.4** Opacity vs Flow in the Brush tool Options panel

Brush Tip Shape – select the shape of the Brush from the drop down menu in the Option panel, fig 7.1. Alternatively, you can change the Brush Tip Shape from the Brush panel, fig 7.2.

## The Brush Panel

The Brush panel (fig 7.2) can be opened from the Window menu if you do not already have it visible in your workspace.

At first inspection, the Brush panel can look a little daunting. However, it is not as scary as it first appears when you know that you are just changing the appearance of the Brush Tip and as you make changes to the settings, the result can be seen in the preview section of the bottom of the panel. There are a lot of various “Jitter” settings in this panel and for the word “Jitter” just read “Randomness”. Adding a degree of randomness to your brush strokes can make them appear more natural and painterly and so there are many settings to help you achieve this.

To edit a Brush you must click on the property that you wish to change from the list on the left of the panel. Make sure that the box is ticked and that the property is highlighted, by clicking on its name. This will display the settings for that property in the area on the right. **NOTE:** just ticking the box will not give you access to the settings, the name of the property must be selected.

Many of the settings have a drop down menu associated with them, fig 7.5. These choices are to assign that setting to graphics tablets. The fade setting helps none graphics tablet users, by somewhat simulating the effect of pressure sensitivity. The stroke Fades to produce a tapered effect when used for Size Jitter, fig 7.6.

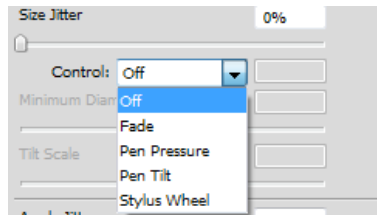
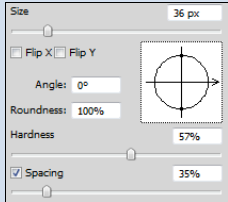


Fig 7.5 the drop down menu for Size Jitter




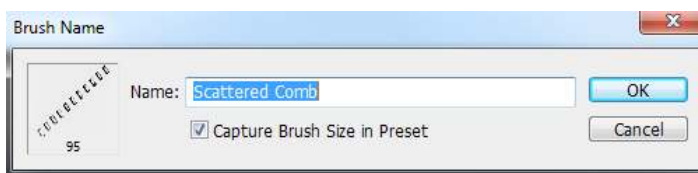
Fig 7.6 the result of the Fade option when selected for Size Jitter

Brush Panel Setting	Description
<b>Brush Tip Shape</b>	Select the style and shape of your brush. Make basic adjustments to your brush in the section at the bottom of the panel. 
<b>Shape Dynamics</b>	Add randomness to the basic shape of the brush tip.
<b>Scatter</b>	Adding scatter will randomly draw points away from the path of your brush stroke. The higher the scatter number, the further away from the stroke the point will be drawn. Use the count settings to add more points.
<b>Texture</b>	Add a texture to your brush stroke

<b>Dual Brush</b>	Select a second Brush Tip to combine with your initial selection
<b>Color Dynamics</b>	Add randomness between the foreground and background colours or add randomness to the individual colour components.
<b>Transfer</b>	Add randomness to the Opacity and Flow values.
<b>Noise</b>	Add graininess to your brush stroke.
<b>Wet Edges</b>	Darkens the outside of the brush stroke and lightens the inside to produce a water colour effect.
<b>Airbrush</b>	Turns on the Airbrush effect to allow the build-up of colour.
<b>Smoothing</b>	Smooth's out the brush whilst drawing curved strokes
<b>Protect Texture</b>	Use this setting to achieve constant patterns across multiple texture brushes.

### Saving Custom Brushes

Once you've gone through all of the hard work of creating an interesting custom brush, it makes sense to save the settings, so that you have it available to use in all of your work. To save your brush as a preset, open up the Brush Preset panel and click on the "Create New Brush" icon at the bottom of the panel . A dialogue box will open, allowing you to name your brush and assign a default size if you wish, fig 7.7.



**Fig 7.7** save and name a new Brush Preset.

The new Brush Preset will be added to the bottom of the list.