

Extraction Tool in Photoshop 7, CS and CS2 Notes by Rob Berdan

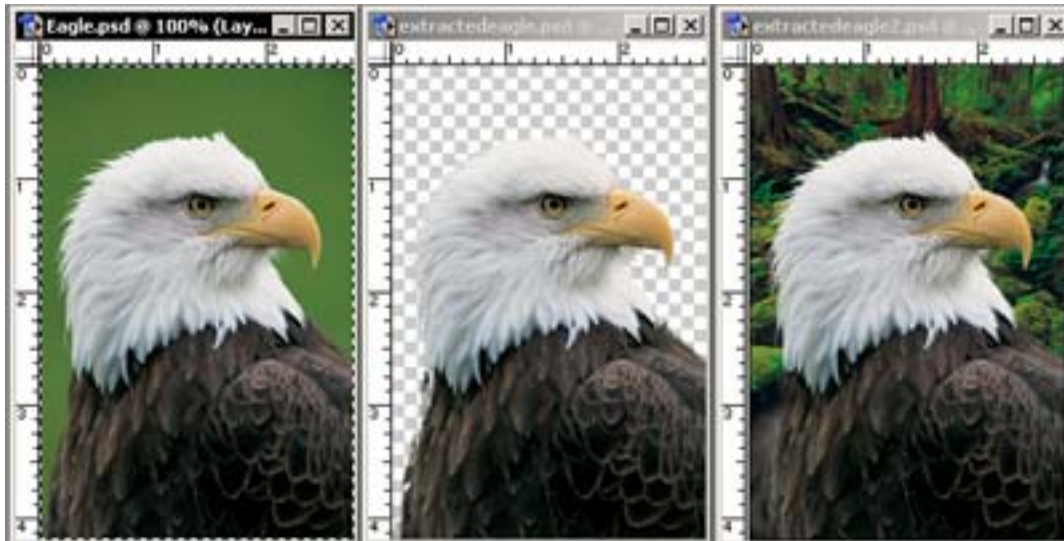
Extracting a subject from the background usually in order to place it on another background or make the background transparent can be done a number of ways using photoshop. Often the quickest way if the background is fairly uniform is to use the magic wand and select the background, then invert the selection and copy or move your subject by dragging onto another picture or layer. If the background is complex (e.g. contains tree branches) or the edge is not clearly defined (e.g. hair or fur) then using selections or masks becomes more difficult.

Photoshop 7, CS and CS2 include a special extract filter to remove backgrounds

6.0 Extracting Images from their Background

6.1 There are several methods to achieve this. This exercise will use the sample eagle head that comes with Photoshop 7.0 and we will replace the background with the picture of the rain forest but you could substitute any background.

Quick simple method is to 1) select the magic wand and click on the background area around the eagle. If necessary shift click to select additional areas on the background. Once the entire background is selected Go Select>Select Inverse from the top menu. This will select only the eagle minus the background. You can then either copy and past the selected image onto another image or use the move tool while the eagle is selected and drag it onto another image. You can use Ctrl-T to transform and modify the size of the extracted image over the new background. This often works well, but if the edge is intricate, or the background is complex and contains tree branches this technique does not work as well. In those instances try the Extract filter as described below.



Original image Eagle.psd

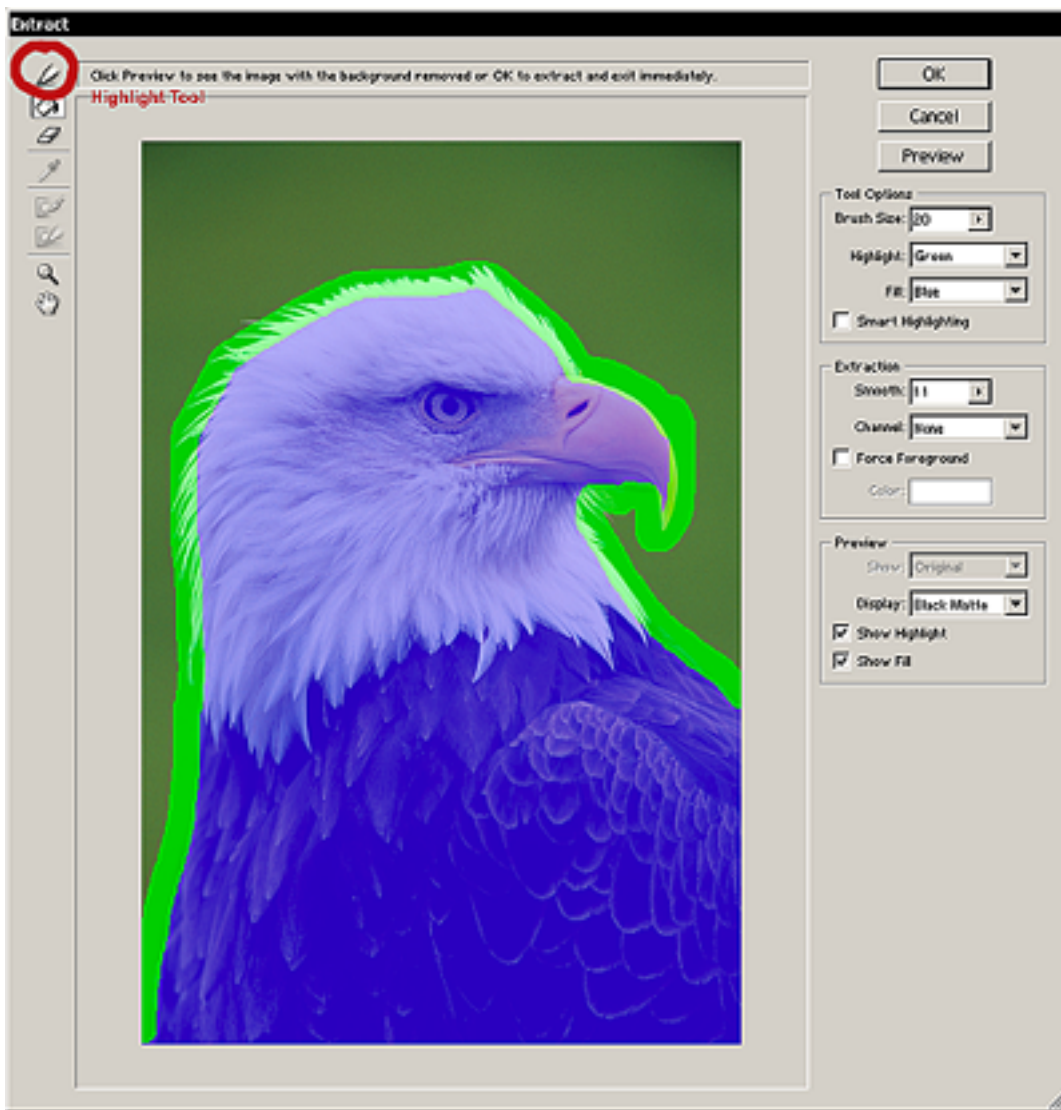
Extracted image

Eagle with new background

1. First Select File Browser and located the Adobe Photoshop 7 sample folder, find the Eagle.psd file and open it.
2. Select Filter>Extract - in the new window select the Pen (highlight tool) set the brush size to about 20 pixels wide and surround and paint a thick line around the eagle make

sure the pen overlaps the both the feathers and back ground. Then select the paint bucket and fill in the area you outline (it will turn blue by default). Click on the Preview button and you will see the eagle against a transparent (checkered) background. Select OK and your will be returned to Photoshop's main window and have a picture of the eagle minus the background. Middle picture above.

3. Open the file with the stream in the rainforest (Waterfall8bit.tif) – it is the same dimensions as the eagle image.
4. Select the Eagle photograph, open the layers palette, add a new layer and drag it down so it is below the image. (See page 3). Select the move tool and drag the rainforest image onto the eagle picture it should be below it in the layers palette if not drag the layer so it is below the eagle and hence behind it. Once the background is in position you can flatten and save the image with the new background.



The Extraction window has several tools to help you refine your selection and view what the extracted image looks like on different colored backgrounds. The main controls you have are as follows:

Brush size – this specifies the width of the highlighter, eraser, cleanup and edge touch up tools. If the edge is clearly defined make the size of the brush smaller, if the edge is “fuzzy” use a thicker highlight brush size.

Highlight default color is bright green, the color can be changed to another color if the subject you are extracting has green as part of it.

Fill – default color is blue, this determines the area of the picture you want to keep

Smart Highlighting – select this option if you are highlighting a well defined edge, it helps keep the highlight on the edge and applies the highlight just wide enough to cover the edge regardless of the brush size. In theory this sounds great in practice it often does not seem to help significantly.

Extraction Options

Textured Image – select this option if the foreground or background of your image contains a lot of texture.

Smooth – default is 0, enter a larger number if you want to increase the smoothness of the outline you drew. It's best to start with 0 or small value to avoid unwanted blurring of details.

Force Foreground – select this option if the object is especially intricate or lacks a clear interior e.g. you can try this feature on an image like grass or subject with lots of fine hair.

Touch up Extraction Tools



Cleanup Tool - this tool is used to erase background traces in the extracted areas. The tool subtracts opacity and has a cumulative effect. You can also use this tool to fill in gaps in the extracted object. Hold down Alt – while dragging to add back opacity.



Edge Touch up tool – this tool sharpens edges and has a cumulative effect. If there is no clear edge, this tool adds opacity to the object or subtracts opacity from the background.

Note: Once you complete your extraction with the extract filter you continue to clean up the image using the Background eraser and the history brush tools.



Try extracting the horse – be sure to highlight enclosed areas like those formed by the legs.