## **Masking With Channels**

When you want a realistic mask for complicated shapes such as a dandelion or a kid with curly hair, don't pick up the Magic Wand. There's a better (and actually easier) way. You can let the image itself help you make the mask, by using Channels.



1. The Channels palette is nested with the Layers palette. Because it looks a lot like the Layers palette at first glance, the Channels palette can be confusing. Channels are NOT the same as layers — they represent the individual color components of the image. In a CMYK image, the four channels represent the four printing plates. In an RGB image, the channels represent the three primary colors of light — red, green, and blue.

To begin making a mask, click on the *name* of one of the channels. (Don't click on the eyeball: That's the visibility control for displaying and hiding the channels.) As you click your way through the channels, look for the one that will provide the best starting point for a mask.

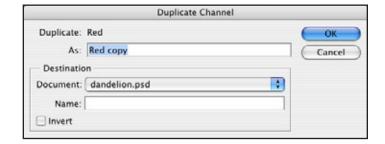
At its simplest, a mask in Photoshop consists of a white "hole" in a black area. Masks function like stencils: the "opening" in the mask allows pixels to be visible, or allows you to paint or apply an effect in a localized area. The black area acts like the cardboard of a stencil, hiding pixels or preventing paint or an effect from occurring.



In this project, we want to create a mask that will silhouette the dandelion from its background, so it can be placed realistically into another image. So we need to create a dandelion-shaped white hole in a solid black background.

2. In this image, the red channel is a promising start. Duplicate the red channel: In the Channels palette menu (little triangle-in-a-circle), choose *Duplicate channel*. You can give it a meaningful name, or just accept the default name and click **OK**.

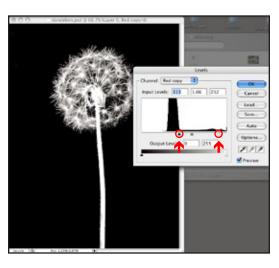
This new channel is called an **Alpha Channel**, indicating that it's not one of the color channels, but something extra. Think of it as a place to store a mask until you need to use it.



**3.** Photoshop displays the new mask channel. You'll need to modify it in order to create a nice, clean white opening for the subject (the dandelion) and a good, solid black background. One way to do this is to use **Levels** (Image > Adjustments > Levels).

To darken the background, move the black triangle to the right until you see the background become solid. To make a nice clean opening for the subject's mask, drag the white triangle to the left.

This is a back-and-forth operation: You want a clean black-and-white mask, but you don't want to go too far or you'll erode detail. So push the black triangle a bit, then move the white triangle a bit. Juggle back and forth between the controls until you have a decent mask.



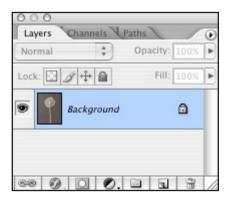
**4.** Return to the image itself by clicking on the "RGB" **name** (not just the eyeball) at the top of the Channels palette. (In a CMYK image, you'd click on the CMYK name). *See Fig. 4 at right*.



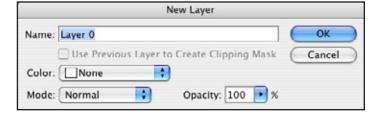
Fig. 4: Click on the name of the composite color image. In an RGB image, click on "RGB." In a CMYK image, click on "CMYK."

**5.** The *Background* layer in Photoshop behaves like a photo print glued down to a piece of board: You can't put anything under it, and you can't have transparency in that layer.

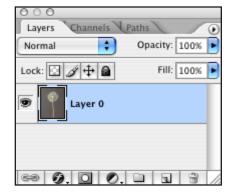
To allow the mask to silhouette the subject from its background, you must first "unglue" the layer. Return to the Layers palette, and double-click on the name of the Background layer.



You'll then see the New Layer dialog, but it's just referring to the now-unglued former Background layer. You can give it a fancy name, or you can just accept the default name, "Layer 0." Click OK when you're done.



There's no change to the appearance of the layer, but notice that the name of the layer has been changed in the Layers palette.



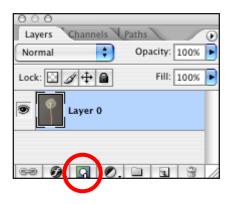
**6.** At this point, the mask is "sleeping" — it's not yet functioning as a mask. To activate the mask, choose **Select > Load Selection** and choose the name of your mask channel from the Channel pop-up menu.

You'll see the "marching ants" marquee around the mask shape, indicating an active selection. At this moment, you could paint with a brush, or perform a color correction, and the effect would be limited to just the area of the image that's within the active selection.

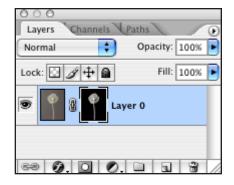
But in this case, you'll use the selection to isolate the subject from its background, so you can transplant it into another image.



7. To convert the "marching ants" to a Layer Mask, click the mask icon ( ) at the bottom of the layers palette. Now the mask can do its job, to separate the subject from its background without destroying pixels. It's better to use a Layer Mask than to just delete pixels, because this is a non-destructive approach that doesn't damage or delete pixels. Great if you change your mind later!

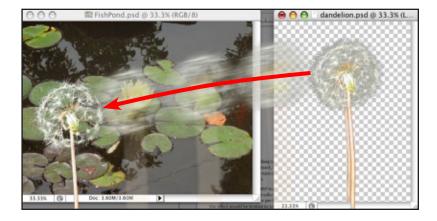


8. Once you create the Layer Mask, you'll see the mask icon next to the image icon in the Layers palette. This is a hint that you have two occupants in this layer: the image, and its mask. You can work separately on mask and image: just click the appropriate thumbnail.



9. To transplant the dandelion into another image, just open up the other image. Then switch to the Move tool ( ), and then click and drag the dandelion onto the target image.

A new layer is created in the target image. You can use the Move tool to position the dandelion as you wish, and you can scale and rotate the dandelion easily.



You can use this technique for furry animals, foliage, soft hair, and any other irregular edge. It's easier than using the Magic Wand or Pen tool, and creates a much more realistic mask.



