

Removing Shadows

Drop shadows are a fast and easy way to create the illusion of depth. It's an old artistic technique that really found a home with image layers. That's because drop shadows offered an easy way to define the spatial relationships between multiple overlapping images, and layers are all about overlapping images.

Drop shadows are one of the reasons *Jungle DVD* is such an effective way to render trees and foliage. The problem is trees stand vertical, which means they are commonly viewed against distant backgrounds like skies and horizons. In those circumstances you want the drop shadows to fall on leaves, but not on the sky. That's because trailing shadows negate perspective by defining the background space behind the tree as flat. The same principle applies to textures.

For a long time there just wasn't an easy way to keep the good part of the shadowing effect while eliminating the bad. That's not the case anymore.



This tutorial shows you how to remove unwanted shadows from around trees and foliage. Unfortunately, I haven't found an easy way to remove shadows using Painter. So, the solution offered for Painter users is Photoshop. Paint Shop Pro users have an easier alternative, although PSP has some minor problems too. The PSP solution is outlined on the last page.

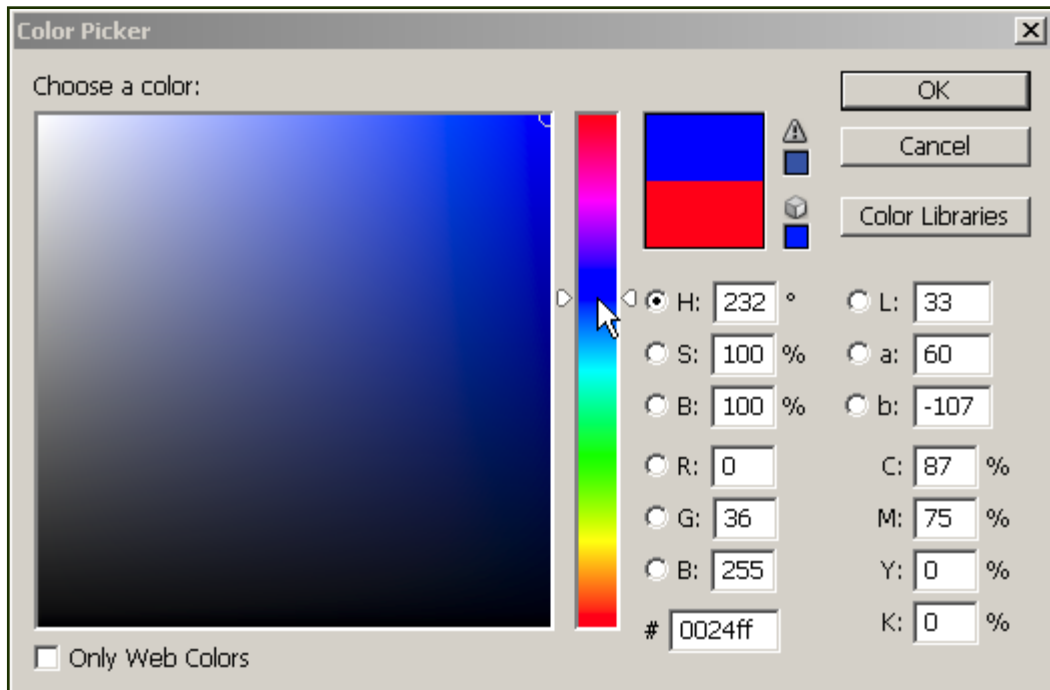
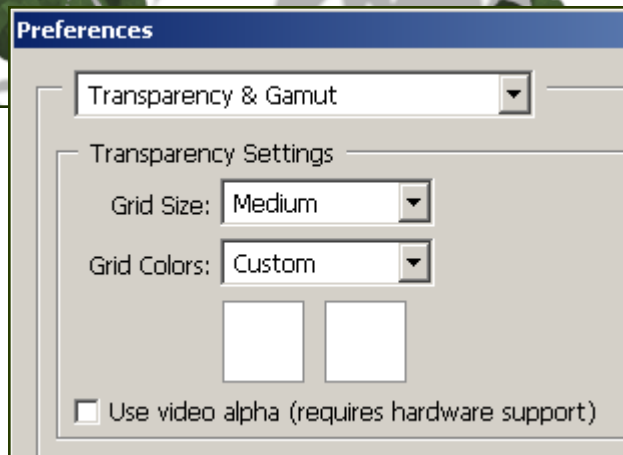
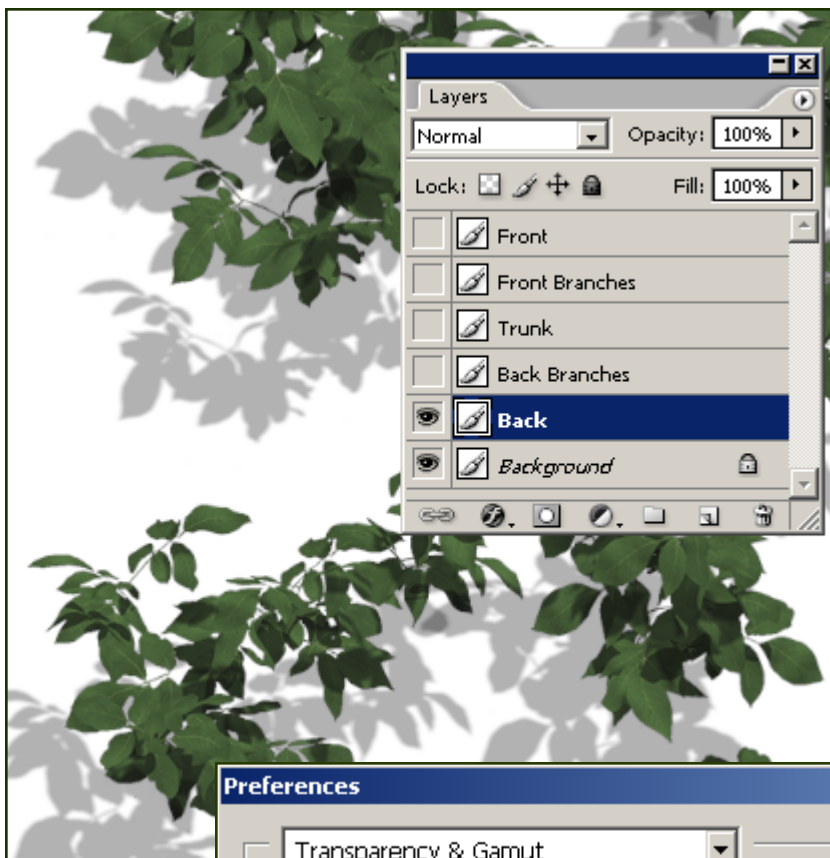
The solution is simple and very effective. The idea is to make Photoshop think the semi-transparent areas of shadow are tinted with a color and not simply black. If the shadow color is the opposite of the foliage, it will be easy to select the shadow and not the leaves.

Starting with the shadowed image you've created in Photoshop or Painter.

- 1) Save the layered image using Photoshop's PSD file format.
- 2) Open the file in Photoshop.
- 3) If you have the "Transparency & Gamut" preference set to the default checkerboard pattern, you may want to set it to white. A white setting allows you to see and select shadow areas more easily.
- 4) Make sure the layer you want to work on is visible. Turn visibility off on all of the other layers except the Background.
- 5) Double click on the Foreground/Background color swatches on the Tools palette to open the Color Picker.
- 6) Select the color that most contrasts with the image colors on your shadowed layer. If the leaves are green, the opposite color will be red.

(Be sure to choose the most saturated, pure version of the color and choose Okay.)
- 7) Select the Background and use the Edit: Fill command (Shift + F5) to fill it with the contrasting color.

If the leaves on your layer are green, the

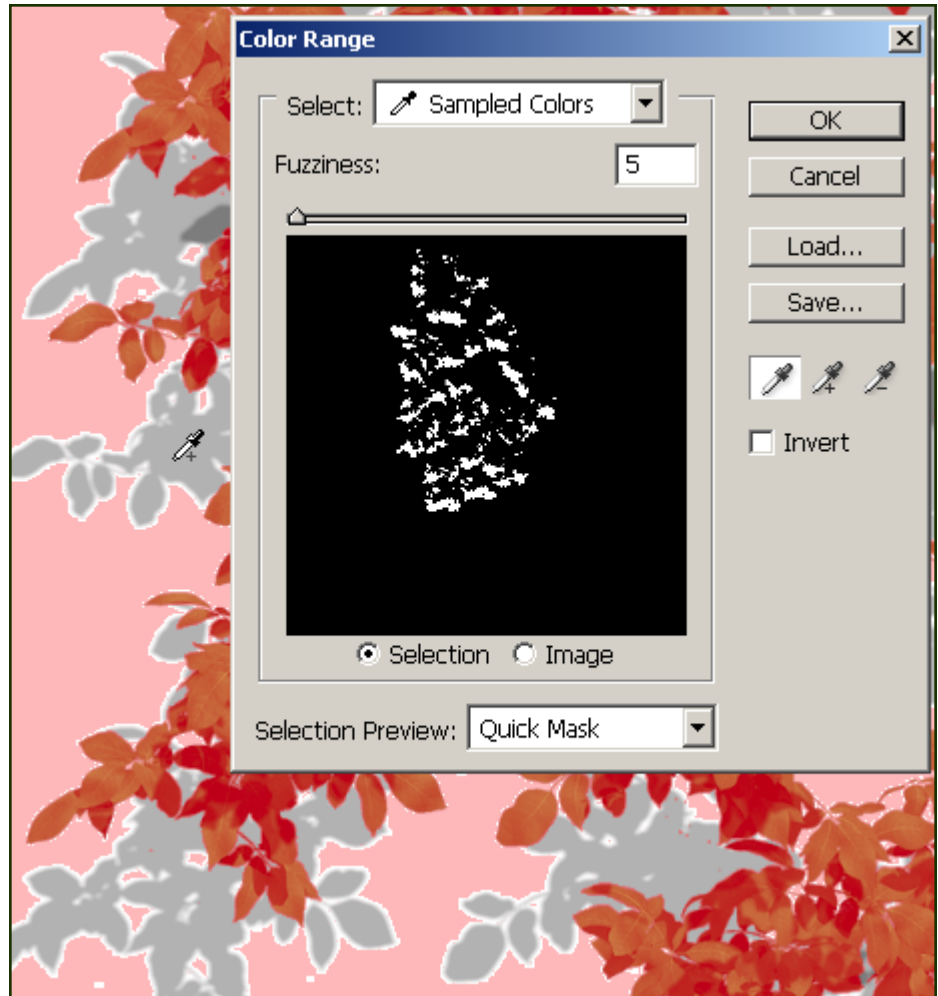


background should now be a bright red.

- 8) Select the image or foliage layer and choose the Color Range command on the Select menu.
- 9) When the Color Range window appears, hold the Shift key down and sample the various areas of shadow by moving the dropper over them. Avoid any opaque or leafy areas when sampling the shadows. If you make a mistake, click Cancel and start over or use the Reset command.

Adjusting the Fuzziness slider makes the selector more inclusive. So, try increasing Fuzziness if you need to get closer to the edge of the leaves.

TIP: If you have trouble separating the shadow from the leaves, turn the Background visibility off. Photoshop will still sample for the color, but the sensitivity will change somewhat. That change often aids in the effort.



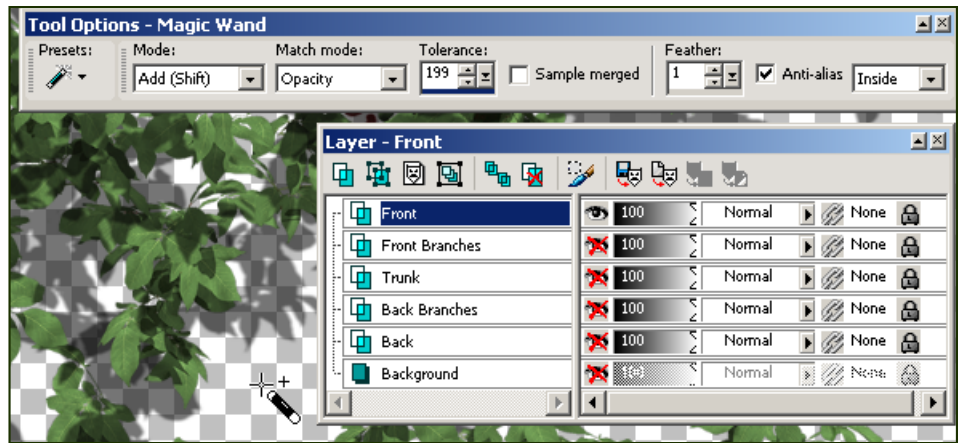
TIP: Try to end the sampling process by sliding the dropper into an area of pure color. That helps to insure that Photoshop includes all of the feathered edge.

- 10) When you are satisfied that you have selected as much of the shadow as you can, click on OK to create the shadow selection.
- 11) From the Select menu, choose Feather and set the amount to .2 (two tenths of one pixel) and hit Enter. You're using feather in effort to soften the edge of the selection slightly.
- 12) Now use the Delete key to eliminate the shadows from the foliage layer.
- 13) With the shadows now gone, expand the Layer menu and select Matting: Defringe at the bottom. Use a pixel value, usually between 1-8 depending on the size of the texture, to remove shadow traces from the edge of the foliage.
- 14) Despite best efforts, the foliage layer still has a harsh edge. Here's the fix. Use Transform (for the layer) or Image Size (for the file) to reduce size. The trick is to use a setting of 1% or less. The greater the change in size the greater the loss of crisp detail. This will smooth the image edge while minimizing loss.

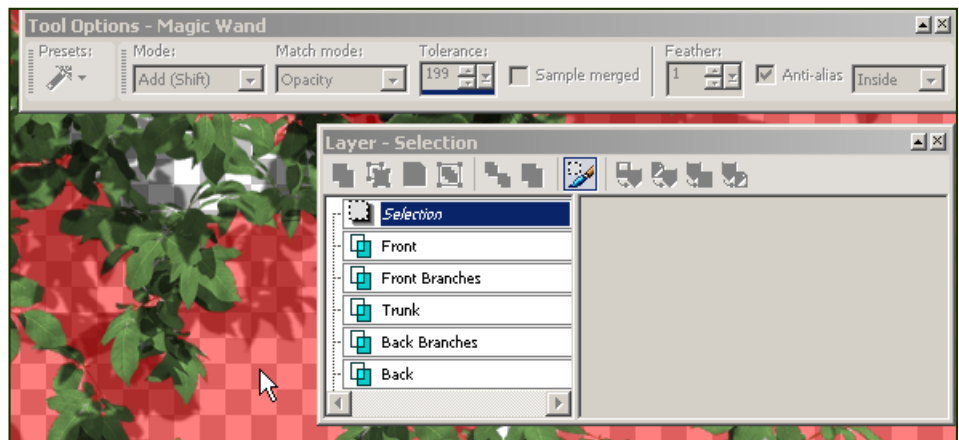
What about Paint Shop Pro?

So what are the alternatives for Paint Shop Pro users lacking Photoshop? Unfortunately, there is no Color Range command in PSP. So, the preceding doesn't apply to PSP. There is an alternative, however. Since the excess shadow areas are seldom fully opaque, PSP users can set the Magic Wand tool to create selections based on layer opacity. It's not perfect, but it is an easy and effective alternative to the Color Range method and you don't have to change programs to do it.

- 1) Select the Magic Wand tool and make the Tool Options palette visible.
- 2) Use Replace or Add (shift) for Mode.
- 3) Choose Opacity for Match Mode
- 4) Set Tolerance all the way to 199.
- 5) To smooth the edges where the shadows are removed, set Feather to 1 pixel and choose Inside.



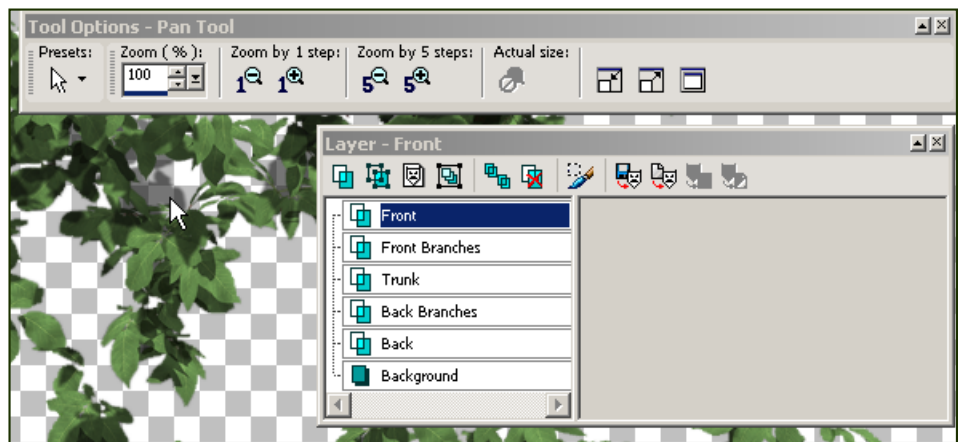
- 6) The trick is to “sample” or select the empty area of the image with the Magic Wand as shown.
- 7) Clicking the Edit Selection icon on the layer palette makes the selection visible, which is a good way to test the selection result before actually making a change to the image.



- 8) If you make a mistake, turn Edit Selection off and choose Select None from the main PSP Selections menu.

(The drawback to using Magic Wand selection tools is they often omit enclosed areas, as seen in the second example. Those can be selected separately, however.)

- 9) When the selection looks right, choose Delete or Clear.



The first time through this may seem a bit confusing. Actually, it is quite easy. You need only repeat it a few times until the process becomes familiar. The trick, if there is one, is to make sure all of the other layers, including the “Background,” are turned off before you attempt to create a selection.

Check for new products and tutorials at *DigArts Software*. <http://www.gardenhose.com>

©2005-2006, DigArts Software, All Rights Reserved Worldwide. You are permitted to make one print copy of this tutorial. No part of this tutorial shall otherwise be reproduced or transmitted in any form including, but not limited to electronic, mechanical photocopying, recording or by any other means without prior written permission of DigArts Software. Commercial use of this document, including fee based instruction, is prohibited without prior written permission of DigArts Software.

DigArts™ and Jungle DVD™ are trademarks of DigArts Software. Photoshop™ is a trademark of Adobe Corporation. Painter™ and Paint Shop Pro™ are trademarks of Corel Corporation.