Painting Trees

Painting trees with Jungle 3D can be as simple or complex as you choose to make it. In the simplest form, trees can be painted on the background much as you would in traditional painting. Painting on separate objects (layers) often works better, however. It offers a more flexible means to control composition, depth and lighting.

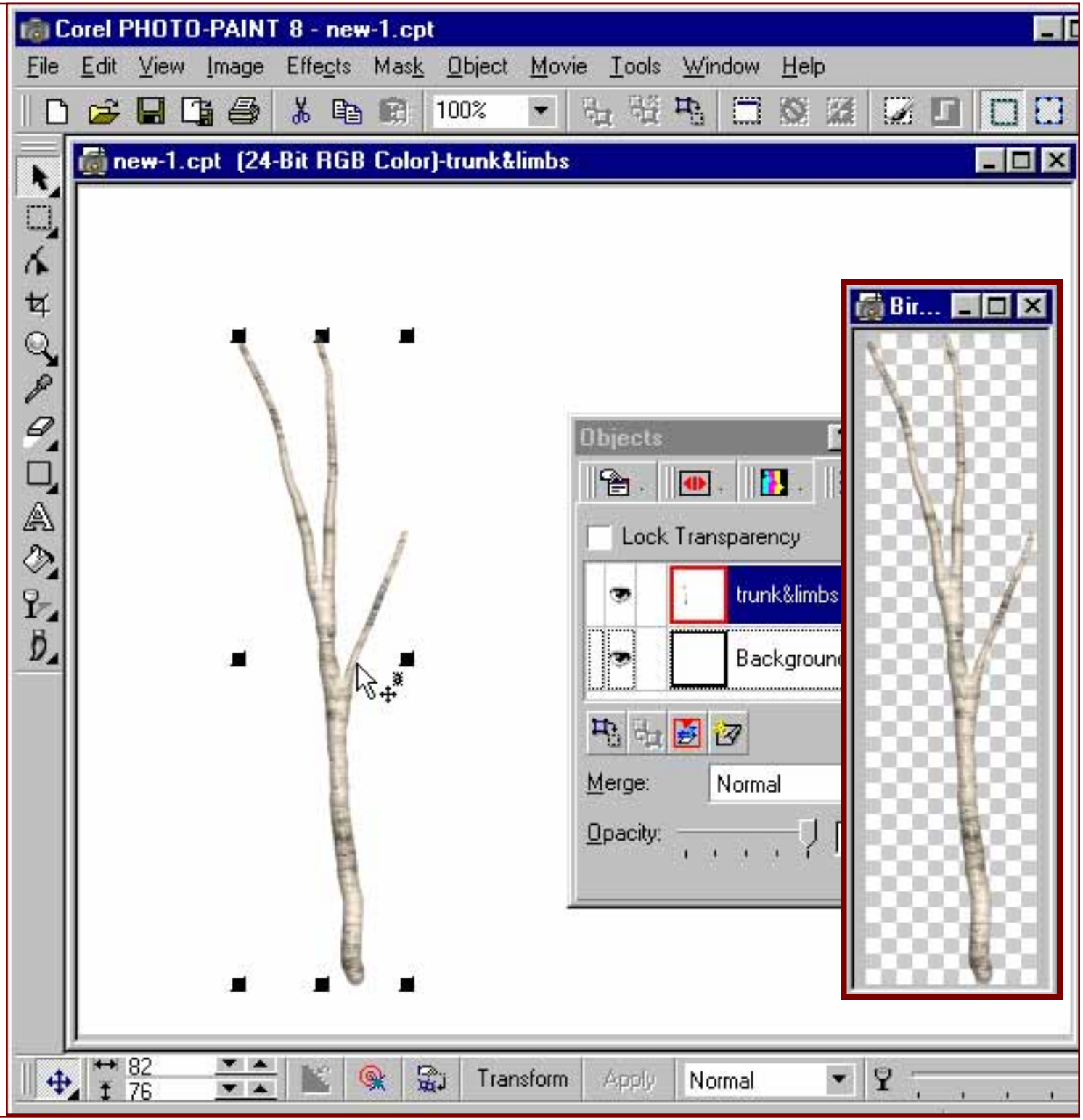
While any number of objects (layers) can be used to paint a tree, this tutorial employs the simple three layer technique. You paint the tree in much the same way you would make a sandwich. The leaves work as the bread and the trunk and limbs become the filler.

The three object technique applies the background leaves to the bottom object layer. Branches are painted on the center trunk object layer and the front or foreground leaves are applied to the top object layer. It's pretty basic really. Here's how.

1) Download the PPdemo.zip file and extract the files to your disk.

2) Create a new 512 by 512 pixel file with a white background.

3) Open the Birch Trunk_1.psd file and drag the trunk object into the new file using the pointer tool.



4) Once you have the trunk object positioned in your working file, double click on the object in the Objects palette and change the layer name to “trunk&limbs”.

5) Select the Image Sprayer tool.

6) Load the Birch Branches_S.cpt image list.

Image lists are loaded by clicking on the image-list folder on the tool bar (shown at bottom).

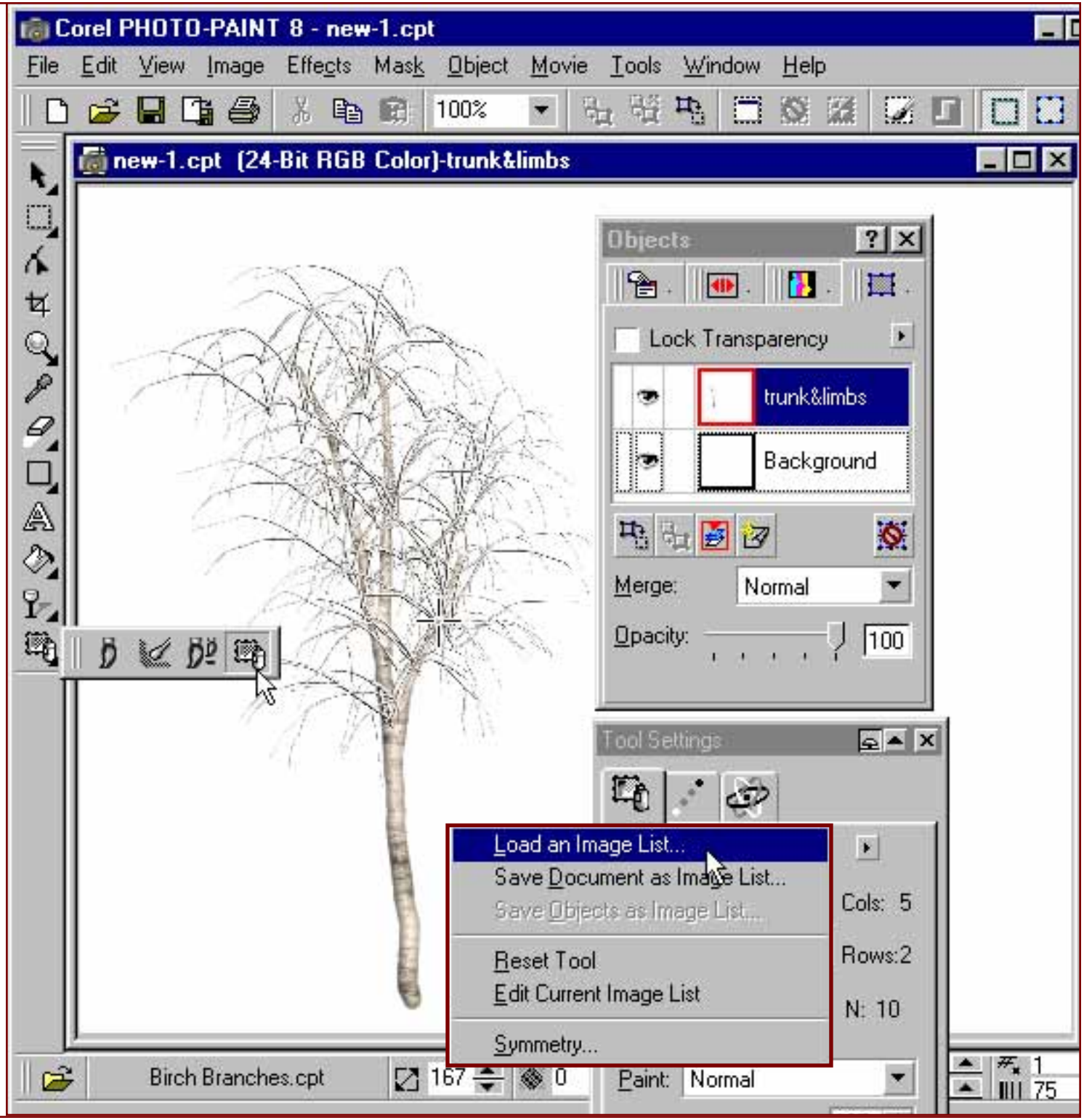
You can also use the Load Image-List command found on the Image Sprayer tool settings docker (click and hold on the little arrow above “Cols:”).

7) Since the branches are the right size for the trunk, the list can be used at its default size.

If you’re using a pen and tablet (best), use dabs or brief strokes to paint branches along the upper half of the trunk layer.

Using a mouse is a bit harder, so try mixing strokes (hold the mouse button down) with intermittent dabs (press the button down to dab a single branch).

Don’t worry if some of the branches don’t connect with the trunk. The foliage tends to conceal these kinds of flaws.



8) Load the Walnut Shadow.cpt image-list so you can paint shadows on the trunk and limbs. Leaves cast shadows so you want to add them for dimensional realism.

9) Select the trunk&limbs layer and check the Lock Transparency setting. This keeps the shadows confined to the visible parts of the object layer, the tree and branches in other words.

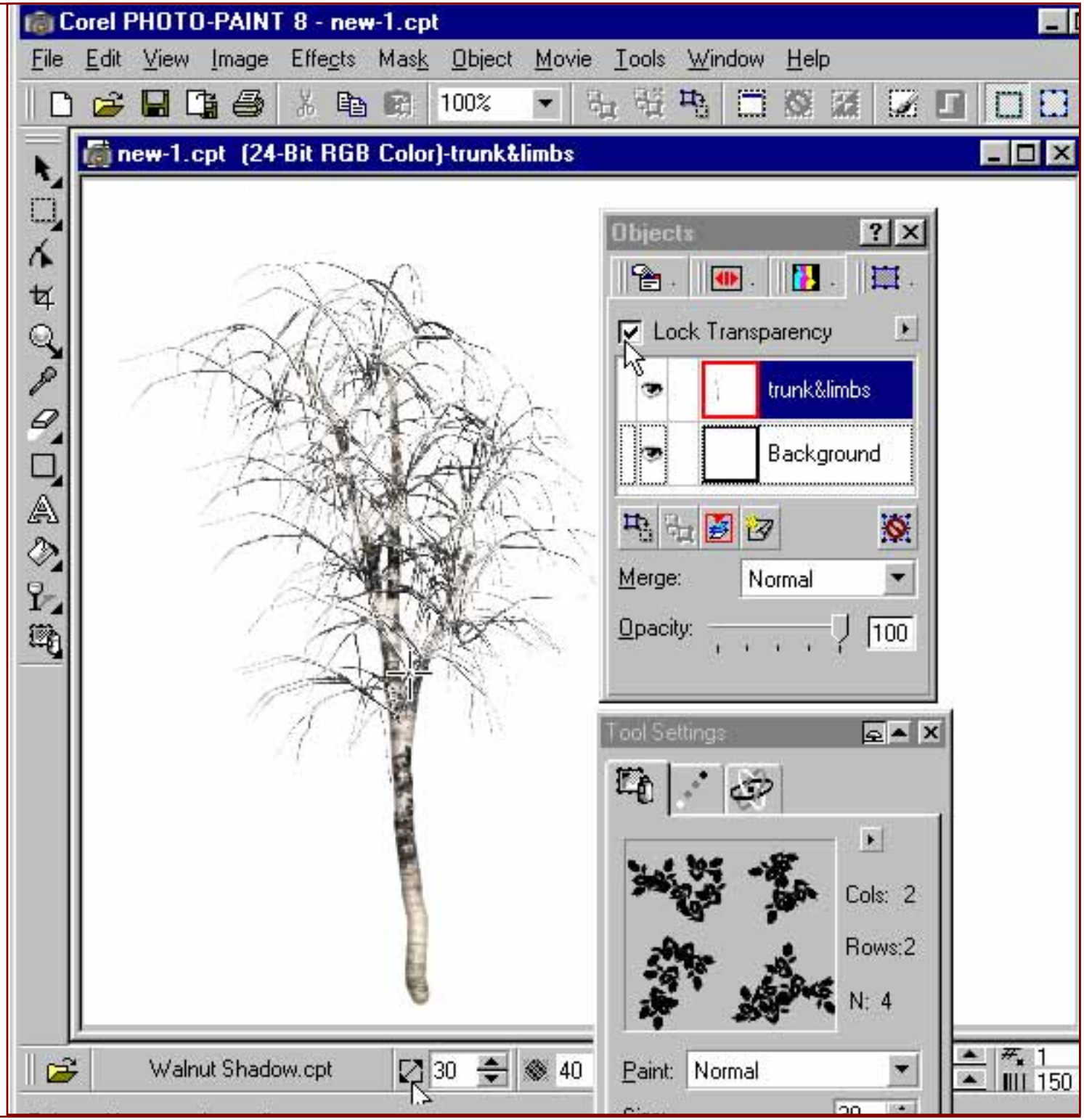
10) The shadows are way too big for the size of the tree. So, they need to be re-sized. Set the shadow list size to 30 using the Property Bar (bottom), or the Tool Setting palette (right).

Since shadows are transparent and appear as dark gray rather than black, set Transparency to 40.

11) Begin painting the shadows on the tree, but paint the shadows in random bunches making sure to leave some areas of the trunk clear.

If the shadows paint in too closely together or in too much or a line, use the Spacing and Spread brush settings on the Property Bar (bottom left & top right below) to add random spacing to the dabs.

Remember, don't be afraid to use Undo until things look right.



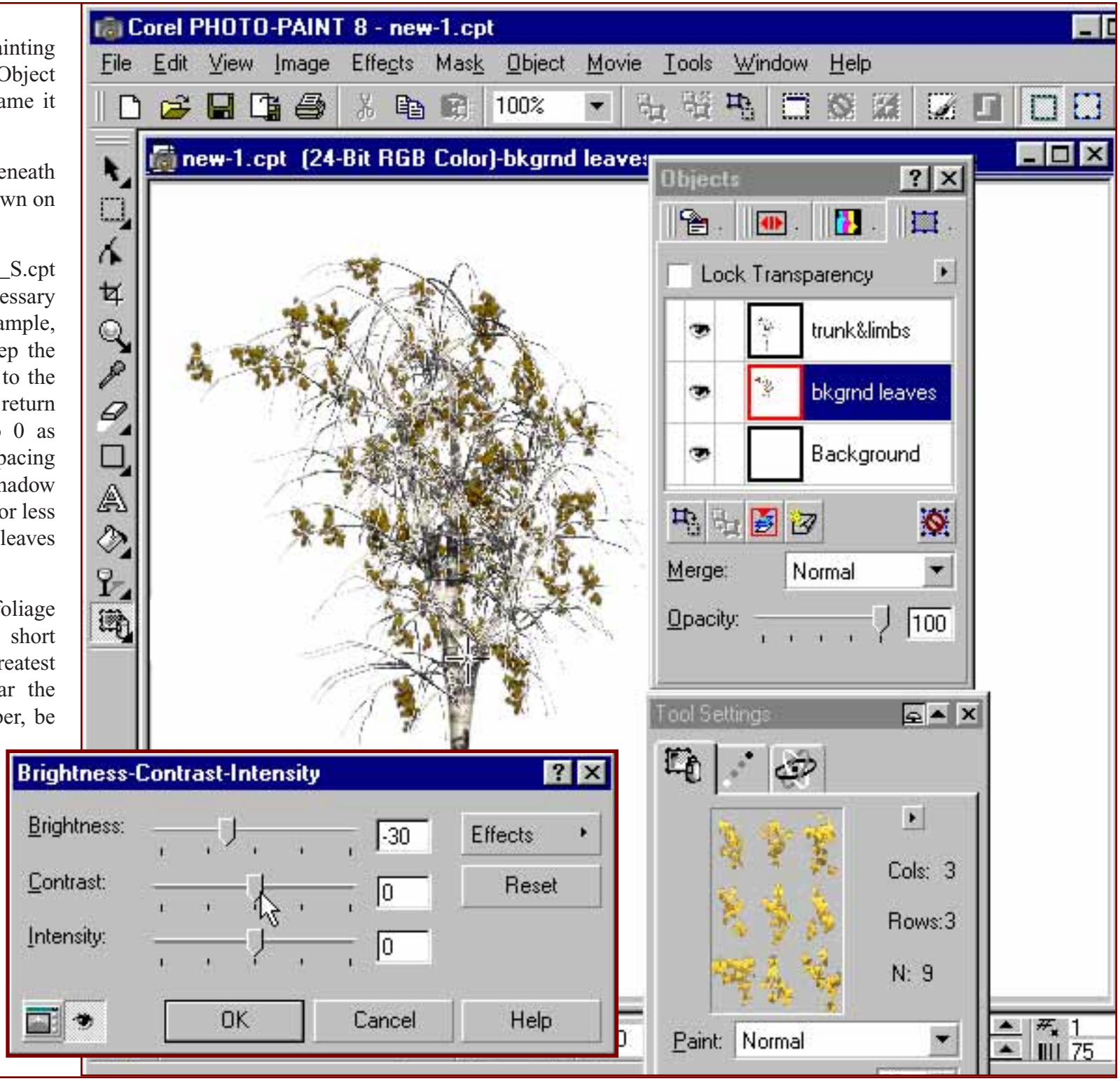
12) When you're finished painting the shadows, create a new Object (layer) for the leaves and name it "bkgrnd leaves."

13) Position the new layer beneath the trunk&limbs layer as shown on the Objects palette (right).

14) Load the Birch (aut)_S.cpt image list and make the necessary brush adjustments. For example, reduce the size to 30 to keep the leaves in correct proportion to the tree and shadows. Be sure to return the Transparency setting to 0 as well. If you changed the Spacing or Spread settings for the shadow list, adjust the Spacing to 75 or less and the Spread to 30, so the leaves paint a little more closely.

15) Paint some background foliage along the branches using short strokes. Try to keep the greatest concentration of leaves near the center of the tree. Remember, be sparing. Less is more with leaves.

16) When you're done, use one of the Color controls like Brightness, Contrast and Intensity to darken the foliage. Try a setting of –30. The idea is to emphasize the illusion of depth by making the foliage appear shaded by the leaves in front.

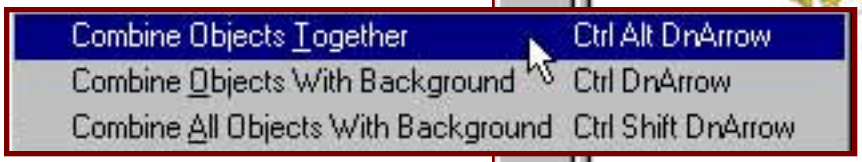


17) Create a new Transparent Layer and name it frontlvs. Make sure it's positioned above the trunk and branches layer.

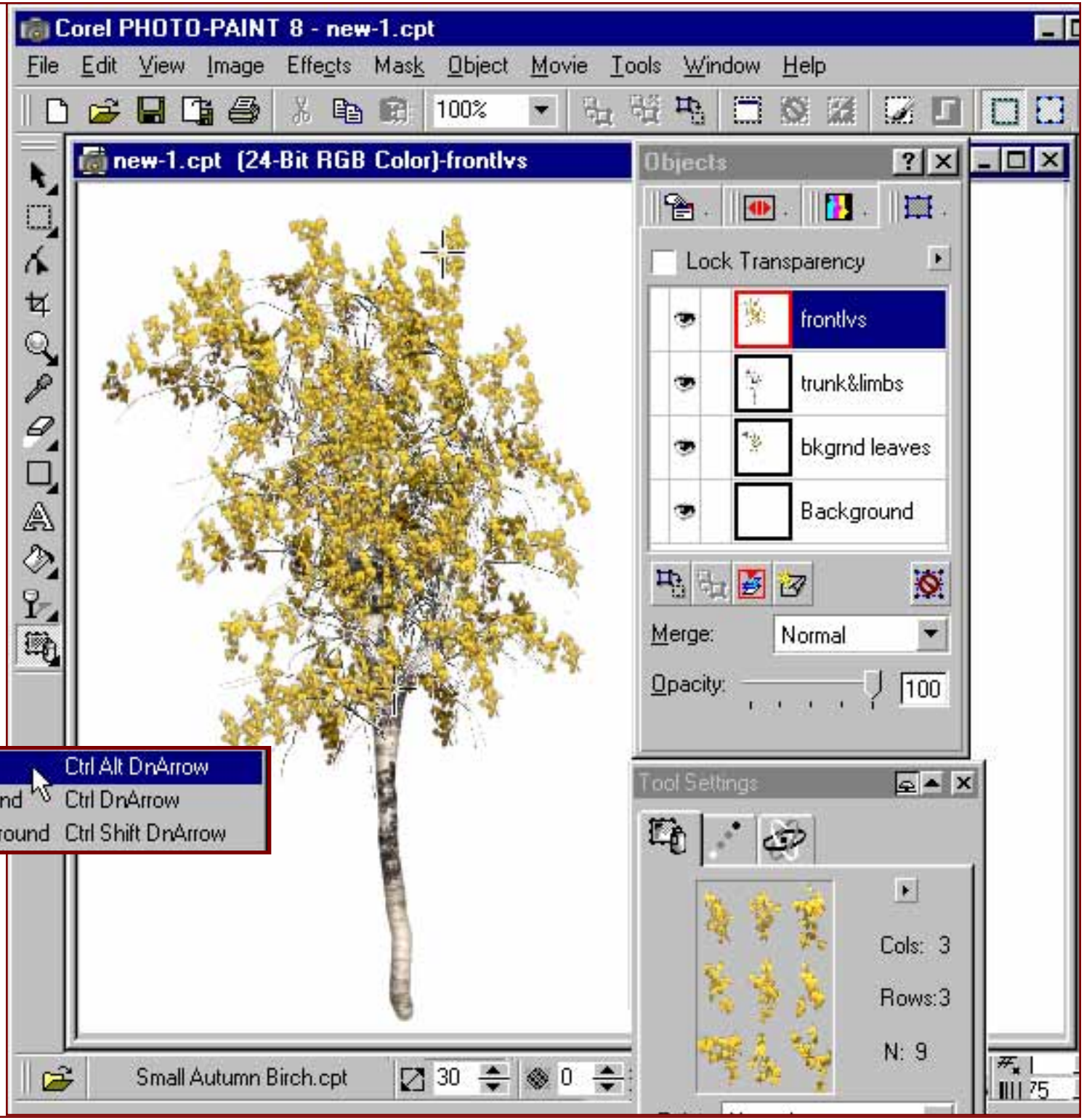
As the illustration demonstrates, you should have three object layers, not counting the background. The trunk and limbs layer should be in the middle.

18) Make the "frontlvs" object layer active as shown and begin painting the foreground foliage using short strokes or dabs along the line of the branches. Concentrate the leaves nearer the center of the tree, but make sure you leave gaps so you can see through to the leaves on the other side of the tree and the background beyond.

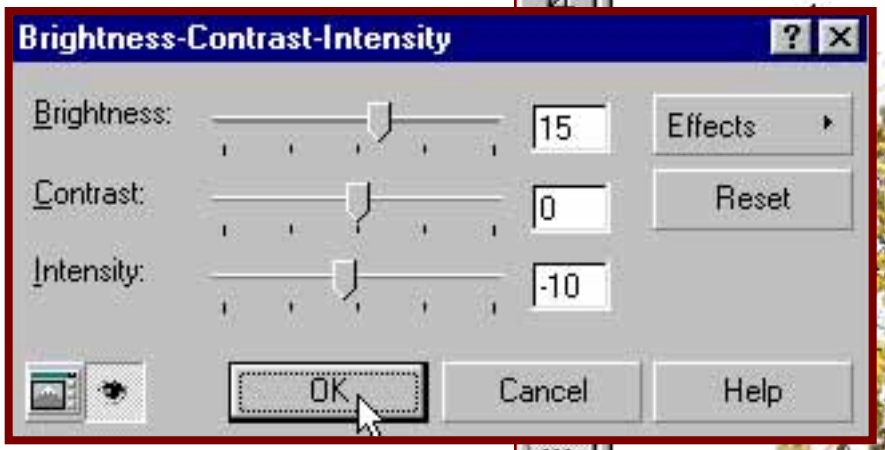
19) Select all three layers while holding the Shift kee down and select Objects > Combine to merge the three object layers into one.



That's all there is to it. It's really that simple. Advanced users can add lots of detail like lighting effects, shadows on the background leaves, or additional layers of leaves, but that's essentially it except for one last thing.



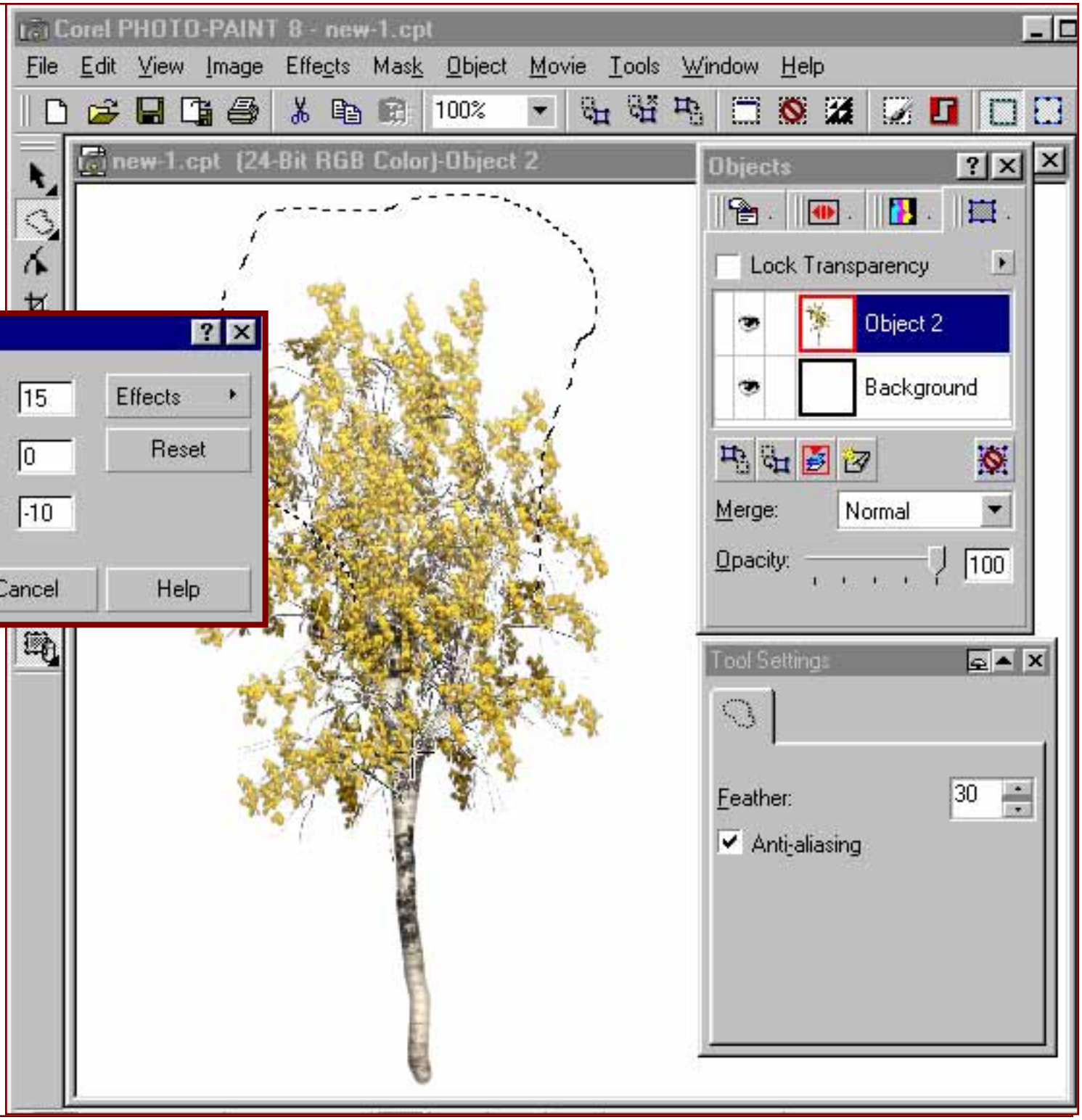
20) Adding an area of highlight can further the dimensional look of the tree. To create that effect, choose the selection tool showon using a 30 pixel feather. Select the portion of the tree that will define the outer form and use the Brightness, Contrast and Intensity to lighten the selected area.



21) If you're working in 2D, you've got a finished tree layer you can composite with a landscape scene you've rendered using a Terragen or MojoWorld.

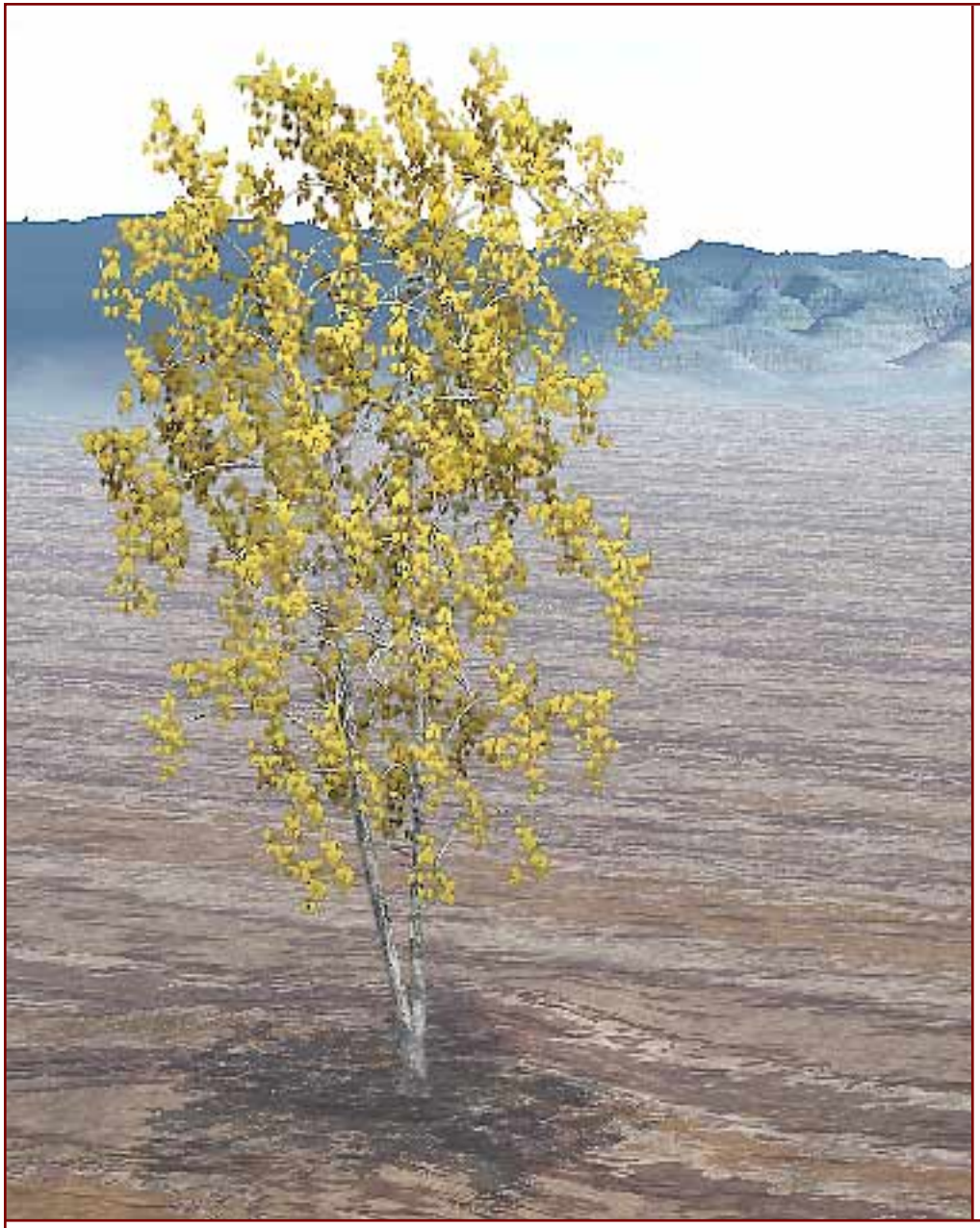
If you're working in 3D exclusively, and want to use the tree as a texture in Bryce, Lightwave or another 3D application, you need to complete the two following steps so the application will correctly recognize the tree as separate from the background.

21) Start by double clicking on the

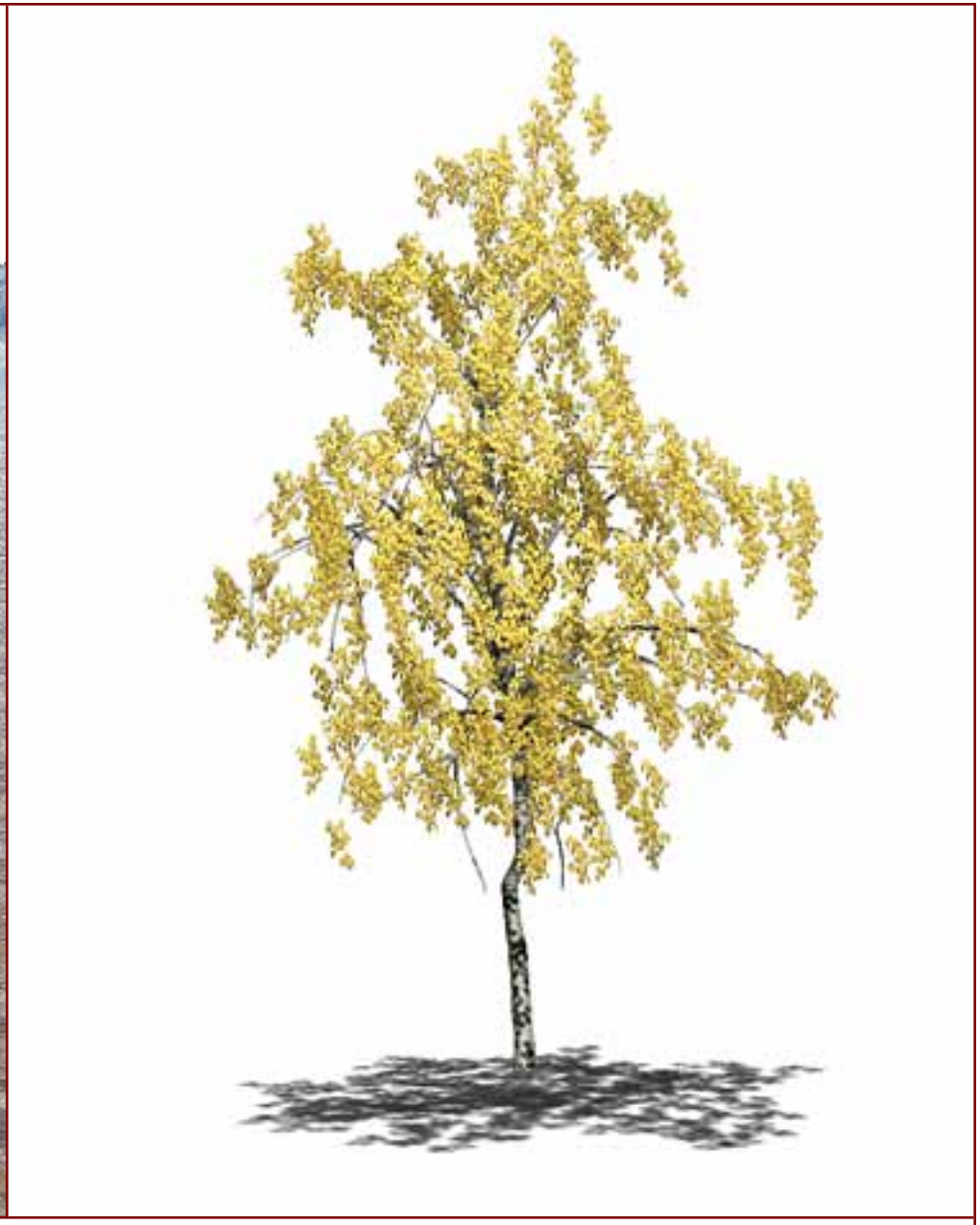


Paper Color icon on the Status Bar. Change the paper color so it matches the medium dark color of the foliage. Now select the Background object layer and Clear so the color becomes visible.

22) Select the tree layer and choose Create Mask From Object. Save the Mask as a new channel and save the file as a .PSD or .TIF, depending on your 3D application's preferences. That's it! You're done.



Jungle 3D tree used as texture in 3D scene.



Jungle 3D tree as 2D layer.

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