PAINTING WINTER FORESTS

Bare trees are often characteristic of winter landscapes. Yet painting the complex interaction of twigs, limbs and branches can be a difficult task. One solution is to use the inherent power of contemporary image-based paints. These paints can not only render winter forests, perspective becomes a simple function of brush control and tablet stylus pressure.

This tutorial incorporates the unique ability of terrain modelers like Terragen, Vue or Bryce to depict highly representational landforms, particularly snow-covered landscapes. The approach integrates these detailed renders of landforms with the representational painting capabilities of image-based paints. In this case, the paints are an assortment of winter trees and tree clusters.

The inherent power of these image-based paints is their ability to spray an integrated diversity of tree and foliage clusters both quickly and easily. The corresponding brush technology that makes this kind of painting possible also gives an artist the ability to control size through stylus pressure. As a result, artists can render perspective as a function of the linear brush stroke itself.

The painting process is simple. Below are four different examples. The original renders are included at sizes appropriate to the demonstration nozzles/tubes/pipes included with the tutorial, or users can download Terragen and render their own landscapes.

The first step is to open the rendered landscape in Painter, Photoshop, Gimp or PSP and create a mask that isolates the landform from the background. (Bryce users can do a mask render and have Bryce create the mask for them.) After you've finished the mask, convert or load it as a selection and make the ground a separate layer.

Having the ground on a separate layer provides the opportunity to paint behind and below the horizon line. This example shows how painting behind the form of a snowdrift or ridge can enhance the perception of dimensional form and space.
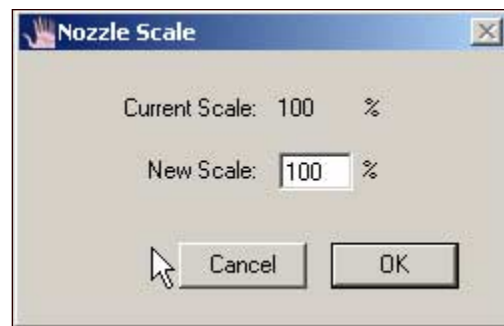
For the example shown here the steps are quite simple:

1) Create a Terragen render.

2) Mask the snow bank

3) Convert the mask to a selection and float the selection as a layer.

3) Load or choose the Large Clusters nozzle/tube/pipe and paint the trees on a layer behind the ground layer. *If you're using Photoshop, open the PSD file and simply drag, drop and arrange a random assortment of layers to compose the forest. Use Transform to control size.*

Painting forest lines is mostly a matter of paint choice and brush settings. All of these examples started with a large paint because the large version lays down the greatest concentration or "cluster" of trees in a brush stroke. Brush settings are equally important, however.

With Painter, it's important to "Set Nozzle Scale" as that establishes the default or original rendering size for the paint. You may need to change size to match the scale of the render, but it is often easier to make changes in scale or size when starting from the default 100% setting, the size the nozzle was originally created at. It helps prevent interpolation mistakes that come from trying to make the trees paint much larger than they are otherwise able.

The Nozzle Scale command is found on the Nozzle fly-out beneath the tool palette. If you intend to use nozzles often, the Customize Keys command under Edit: Preferences lets you make the Nozzle Scale call a simple F-Key command. Try making F1 the Load Nozzle command and F2 the Nozzle Scale command.
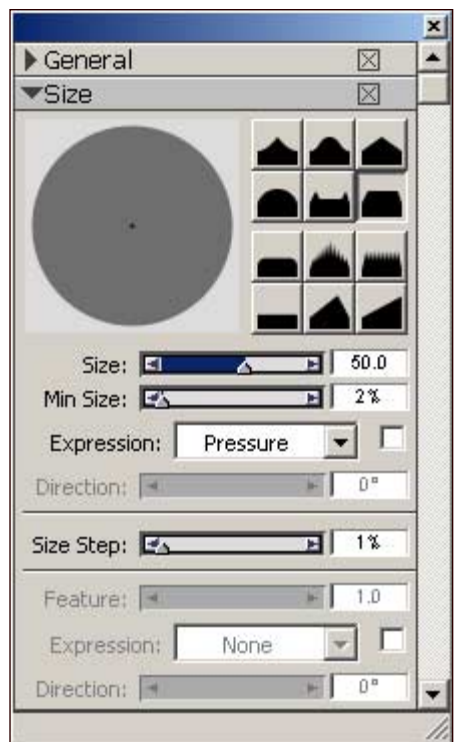
Paint Shop Pro and Gimp do not use a preset control. Selecting the paint opens it at the default 100%. Further adjustments of size are made from there.

Painter and Gimp do let you select a brush control that makes tree size a function of stylus pressure (see illusrations). These tablet settings are particularly helpful for rendering linear perspective using pressure in a brush stroke.

Painter offers the most complete selection of size controls (below). Painter's Min Size setting allows an artist to select the minimum "and" maximum size the trees will paint at. That means artists can adjust the brush so that stylus pressure produces a size range that perfectly matches the scale or perspective of the landform. It is a very powerful feature.

In both of the examples shown here, the primary tree line was a single brush stroke made using the pressure equals size function mentioned above. In the lower example two strokes were used, one for the trees behind the horizon line and one for the trees on the front side of the ridge.
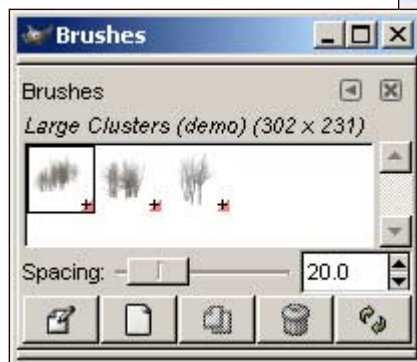
The very small forest canopy visible in the distant background is the same nozzle only with the size reduced sufficiently that the stroke produces very small texture like images.

Another important brush setting is Spacing. Spacing determines the interval or spacing between the applications of tree images. A small value means the trees will spray out very close together. A larger value spaces the images farther apart.
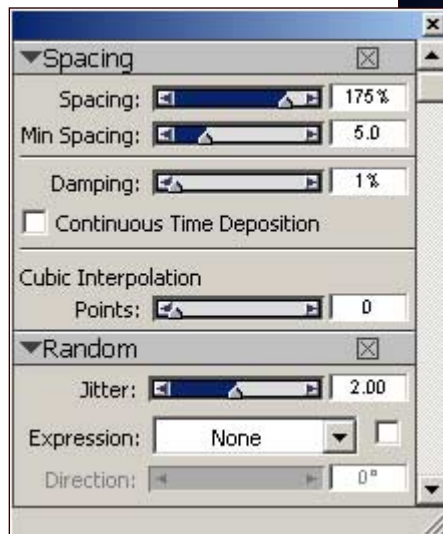
Spacing is influenced by size changes as well. A brush that controls size through pressure influences spacing as well. So, tree spacing will generally be closer when the brush stroke is soft. As pressure increases the spacing between trees will increase as well. It's a convenient result because having trees spray father apart as they become larger tends to reinforce the sense of linear perspective, that trees in a forest appear closer together the farther away they get.

Gimp's spacing control is found on the Brushes palette, as shown here. With Paint Shop Pro, spacing is controlled using the "Step" setting on the Tool Options palette.

Painter uses a more precise spacing control. Actually, Painter has two settings for spacing. The first works like the others while the second, called Min Spacing, allows you to control the spacing of images when pressure is soft and the brush is painting small.

For example, change the Min Spacing to a low value while using the pressure sensitive brush the trees spray very close together when stylus pressure is soft. If you set Min Spacing to a high value, the trees will spray farther apart. Artists can control tree spacing throughout a brush stroke in other words.

The final setting is found only in Painter. It's called Random. This innocuous little brush setting randomizes the placement of the images. It is particularly useful when painting small distant forests because the brush strokes are less linear.

So, having addressed some of the most important brush settings, here are a few practical demonstrations. These simple steps produced the images below.

1) First, paint a mask to isolate the land from the background. Convert the mask to a selection and make the ground a separate layer.

2) Add a new layer above the background but below the ground layer.

3) Use a pressure sensitive brush with the "large" winter trees paint. Start on the left with a soft brush stroke and move right increasing pressure as you continue. Make the trees larger as they get closer. Use Undo and repeat until you get one you like.

4) Create a new, third layer above the ground layer and paint another stroke like the last. Check spacing. Not too dense. Use Undo and repeat until you get it right.

5) Painting the distant forest last allows you to judge the appropriate size or scale. To paint the background forest, create a fourth layer below the topmost tree layer.

6) Reduce the brush size so the trees only paint small. Increasing the Random setting in Painter will scatter the trees as well. Notice we used this layer to do some touchup as well. PSP and Gimp users may find it easier to simply reduce the brush size and tap the small trees into place rather than using linear brush strokes. (Unfortunately, Photoshop users are limited to using Transform to change scale.)

7) Once you've painted the assorted tree layers, you can use tools like Dodge to lighten the forest as it moves away or Clone to add snow deformations.

There's a theme at work here and it should quickly become apparent. In this second example, the idea was to make it a night scene with two vanishing points.

1) Like before, we painted a mask to isolate the land from the background and then converted it to a separate layer.

2) Once again we added a new layer above the background but below the ground layer so we could paint trees behind and below the horizon line.

3) Using the same pressure sensitive brush and the "large" winter trees paint, we started our first brush stroke on the left increasing pressure to make the trees larger as they approached the center. We then repeated the stroke from the right.

4) After creating a third layer above the ground layer, we used two more tapering brush strokes. Make no mistake, we used Undo several times and adjusted Spacing until we got the right look. When in doubt, we hid the layer and added a new one, then tried again. That allowed us to choose our favorites later.

5) Finally, we used the Small Clusters to add two trees on a layer in the foreground.

6) The image became a night scene by using a combination of gradient masks, color adjustments and Burn brushes, but other methods will work just as well or better. A straight Clone brush touched-up any tree flaws.

7) When all of the above was done, we added one last layer above the others and cloned some snow deformations around the base of the tree trunks.
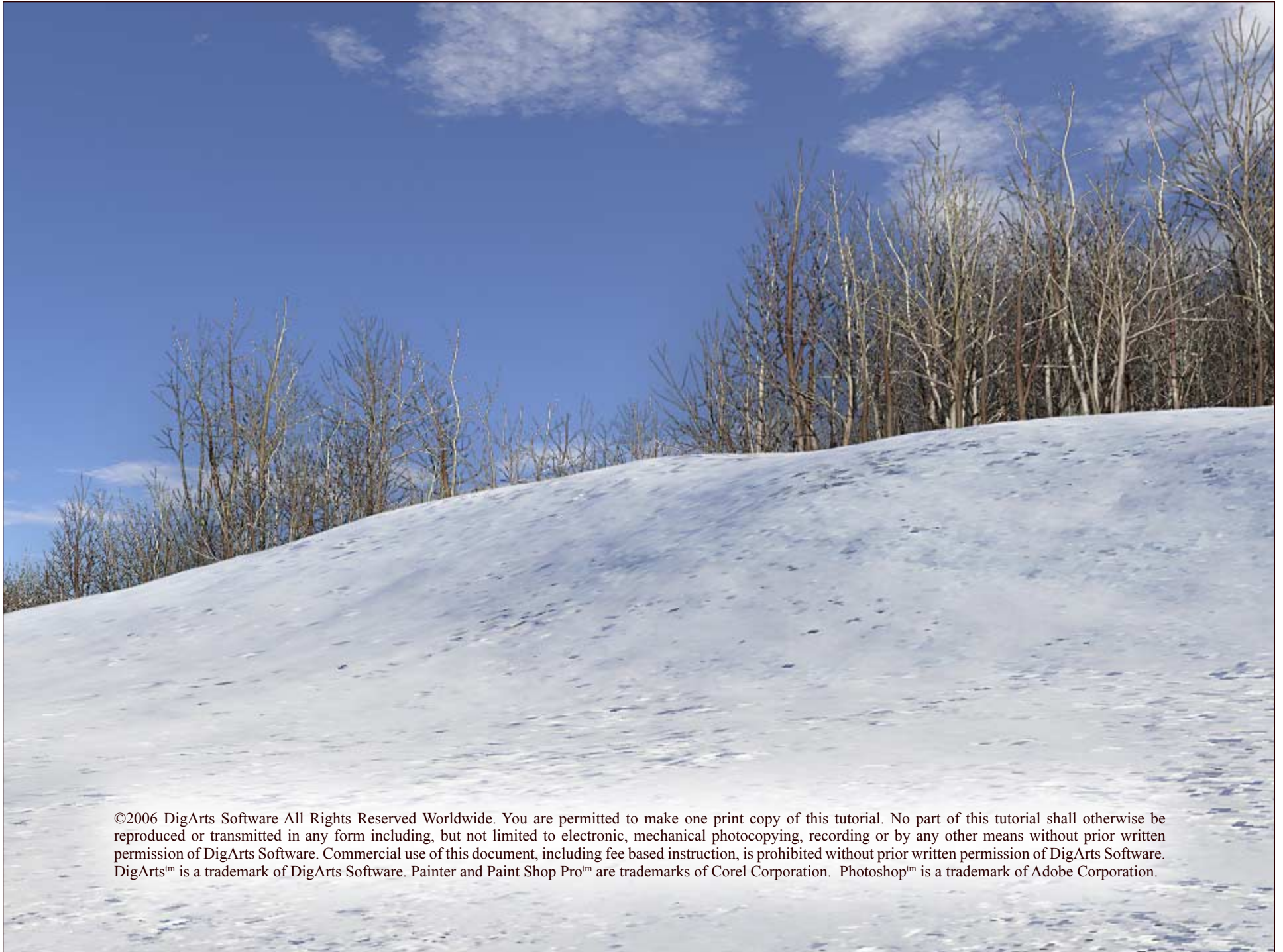
This final example moves the forest towards the look of a winter storm.

1) Just like before, we masked the ground and made it a layer.

2) Similarly, we painted trees behind and below the horizon line.

3) Using a pressure sensitive brush and the "large" winter trees paint, we started our brush stroke on the left and increased stroke pressure as it moved right.

4) After completing the initial stroke, we loaded a "medium" paint, which sprays smaller clusters, turned off pressure sensitivity and manually modified the brush (tree) sizes so we could fill-in or touch-up areas along the tree line.

5) Finally, we added a new layer below the foreground tree line and painted the distant background forest.

6) We used a clouds paint from Jungle DVD with the same pressure sensitive type brush to paint the sky, and using a similar approach to linear perspective as well.

7) After finishing the sky, we saved the image as a Photoshop .PSD file and opened it in Photoshop where the Dodge brush created a coating of snow on the trees and masks and gradients to made color adjustments to the sky. The blown snow was done using a simple captured brush and recorded brush stroke in Painter.

All of these paintings take less than an hour to complete. Of course, taking your time can improve the result. The idea here is to show you how easy it can be.