

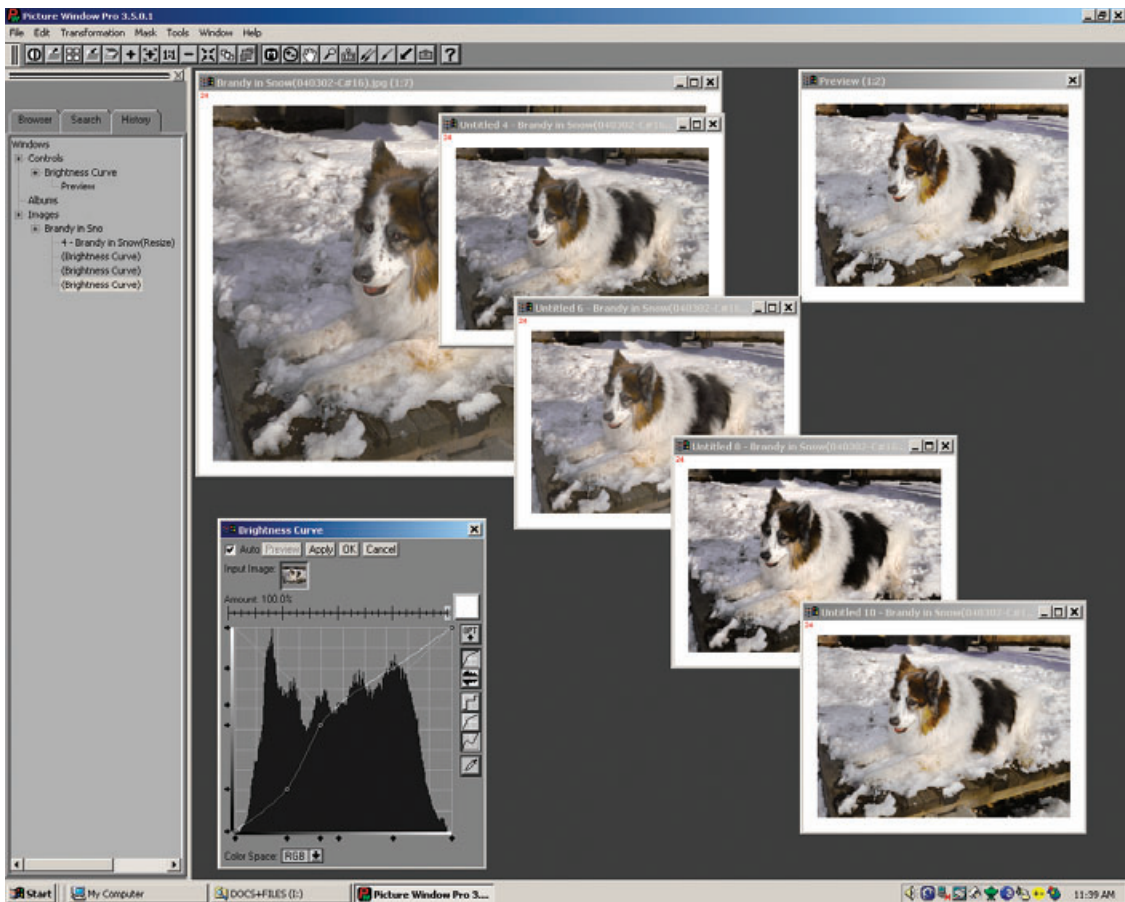
### **Picture Window Pro v4 (<http://www.dl-c.com>)**

Picture Window Pro (Figure 3-4) is an impressive and, at \$90, inexpensive digital darkroom program. Published by Digital Light & Color, this program is fully 16-bit native, offers multiple undos, supports color management and device calibration better than Photoshop, has color correction and advanced sharpening tools that outdo Photoshop's, and takes up only 5 MB of your hard drive. A bonus: Picture Window has no annoying activation schemes, like Photoshop. (*Note:* The nonpro version only supports 8-bit images and lacks some of the best tools of Picture Window Pro.)

If you don't already own Photoshop, Picture Window Pro will give you a lot more bang per buck. You can download a free trial that is fully functional for 30 days. Picture Window Pro only runs under Windows. I run the program under Virtual PC on a Mac, so (non-Intel) Mac lovers aren't entirely out of luck, but it will run much slower. Picture Window Pro understands 8- and 16-bit TIFF, so Picture Window Pro and Photoshop share a common file format, but Picture Window Pro will not read nor write PSD files. If you like using Photoshop's special PSD-related features, you won't be able to easily go back and forth between the two programs.

Picture Window Pro is a deceptively simple-looking program. I've known people to dismiss it simply because it's not Photoshop and doesn't include some of the tools they expect to find. What such cursory examination fails to reveal is that Picture Window Pro comes well equipped with its own unique tools and methodologies.

Picture Window Pro's interface is not Photoshop's. Personally, I don't consider that a bad thing, as I've never been a big fan of the Photoshop



**Fig. 3-4** Picture Window, from Digital Light & Color, works like a real digital darkroom. Each time you change a photograph, you create a new print. This screenshot shows me using the Brightness Curve Transformation to produce four different versions of the original photograph in the upper left background. I can save as many of these “prints” as I choose. I can also work on each print with other tools, and so follow parallel, independent paths of development for the same original photograph.

interface. To use Picture Window Pro effectively, you’ll need to unlearn some Adobe ideas and acquire new ones.

Each time you perform an operation in Picture Window Pro, you create a new copy of the photo in a new window (hence, the program’s name). I can’t overstate how different this is from Photoshop, where operations change the original image. It’s more like darkroom printing, where printing a photo differently doesn’t erase previous prints, except that these are live files. You can go back and work with each one, taking it down its own artistic path.

For example, when the brightness curve control panel appears, so does a copy of the photo in a new preview window. As you adjust the

curves, changes are reflected in the preview window. Press the Apply button, and a third window opens up containing the transformed image. Your original image remains unaltered in its own window, and the preview window and the control panel remain open; you can try other curve settings and every time you press Apply, a new window with a new modified image appears.

These image windows all exist independently of each other, and you can modify any of them using other transformations. PW's browser provides a tree diagram showing the genealogy of all of your image windows, so you can track and manage your workflow.

You can pull off some interesting tricks, once you wrap your head around this. For instance, each image in Picture Window Pro is similar to a snapshot in Photoshop, except it has its own independent existence. Using the clone tool between different image windows is a credible alternative to Photoshop's History Brush. Cloning isn't quite as convenient nor does it have as many options, but you can use it between any two images in PW, without worrying about the chronology of history states. You can "brush" backward or forward in time, even sideways between parallel branches of development.

Picture Window Pro includes some wonderful tools. The color correction controls emulate CC, Wratten, and color temperature correction photographic filters. These feel familiar to traditional photographic printers. Picture Window Pro's color correction transformation (also available as a separate Photoshop plug-in called Color Mechanic, described later in this chapter) is extraordinarily powerful and intuitive and unlike any other color correction tool you've ever used. If you already own Photoshop and have no desire to add Picture Window Pro to your ensemble, purchase that plug-in; you won't regret it.

Picture Window Pro offers resampling with sharpening using advanced sharpening options that do a better job of enhancing fine detail than Photoshop. For the ultimate in preservation of detail, there's PW's advanced sharpen transformation. It's actually a three-part affair: a noise reduction stage, a speck removal stage, and finally a sharpen stage. The first two stages are most useful by themselves for cleaning up photographs, whether or not you need to enhance their sharpness.

I use Picture Window Pro's powerful mask selection methods even when working primarily in Photoshop (masks are just grayscale images, so you can create them with one program and use them with another). You can define masks with hue, saturation, and value ranges, a la Asiva Select (described later in this chapter), with a Mask Brightness Curve (Figure 3-5), and with mask-painting brushes that can find edges and select pixels of similar color (see Chapter 7, Making Masks, page 234). While PW is very speedy at opening and saving files (even faster than Photoshop), most of its comparable transformations run slower. Assume operations like Curves and sharpen or blur filters will take two to three times as long in PW as in Photoshop.



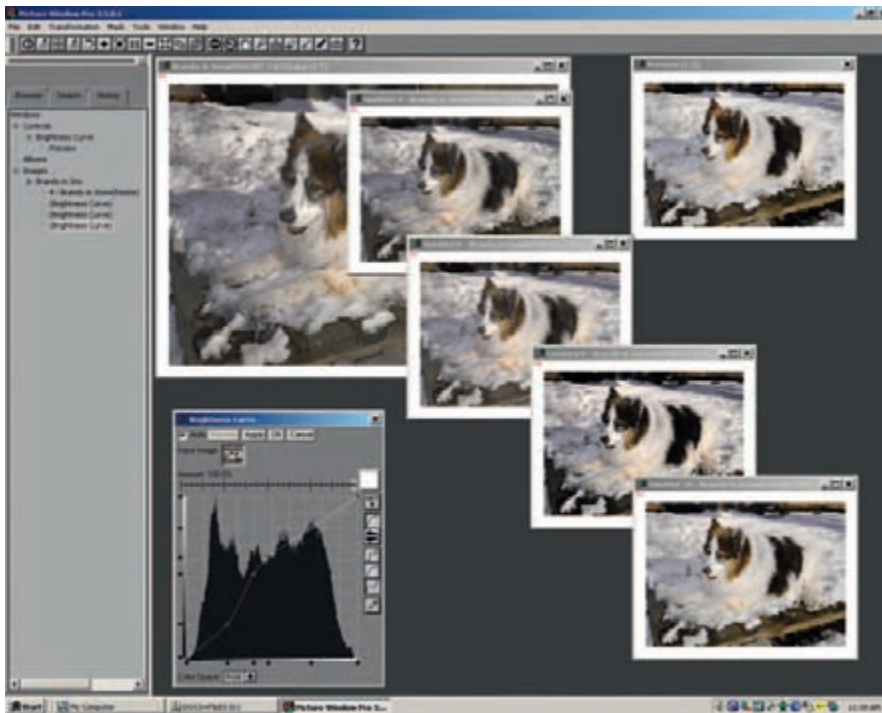
**Fig. 3-5** Picture Window has some very powerful mask-making tools. The Mask Brightness Curve, for example, is much more flexible and useful than Photoshop's crude Color Range tool. Here I used the Curve to create a mask (lower right) that selected the midtones of the photograph in the upper left and smoothly faded out toward the whites and blacks. You can create very complex masks by using several of the masking tools in combination.

## Picture Window Pro v5

[www.dl-c.com](http://www.dl-c.com)

My old review of Picture Window Pro, or PWP (Figure 3-3), is now online. Everything I said there applies to the latest version, PWP 5.0. The program is still an incredibly powerful, fully 16-bit native, \$90 wonder. Many of its tools are still better than Photoshop CS4's. You really owe it to yourself to check out this amazing program. It runs rings around Photoshop Elements.

The latest version has numerous major improvements; this is not a minor update. At least four of these improvements should be of special interest to restorers:



**Fig. 3-3** Picture Window, from Digital Light and Color, works like a real digital darkroom. Each time you change a photograph, you create a new print. This screenshot shows me using the Brightness Curve Transformation to produce four different versions of the original photograph in the upper-left background. I can save as many of these "prints" as I choose. I can also work on each print with other tools and so follow parallel, independent paths of development for the same original photograph.

- *Texture Mask*. PWP 5 has a lovely new kind of masking that selects for textures. It's a lot more controllable than Photoshop's Find Edges or Glowing Edges filters. It should be very useful for selecting various kinds of damage in all photos, such as cracks and paper texture.
- *Multi-Zone Adjustment*. This is a powerful tool for separating highlights, midtones, and shadows so that one can work on them separately. A great deal of damage to old photographs gets localized to one range of tones or another. Dirt or stains on a print, for example, are going to be far more noticeable in highlights and shadows. Cracks, on the other hand, stand out the worst in shadows. Hence, being able to easily work on a selected range of tones can frequently be of real benefit.
- *Bilateral Sharpen*. This is a really interesting approach to sharpening. Instead of just emphasizing the difference between adjacent pixels, this transformation looks for pixels of similar value before deciding what should be sharpened and what shouldn't. Most interesting to restorers is that all the controls are user-adjustable; in particular there is a blur function that is a component of the sharpening analysis that in itself may prove useful for suppressing grain and noise in an image. With the right combination of settings, scaling back the sharpening effect, and emphasizing the blur filter a little more strongly, you can accomplish a lot of the "smooth and sharpen" improvements I describe in [Chapter 10](#), "Beautification," in a single operation.
- *Improved Stack Images*. Even in its old form, I preferred this transformation to Photoshop's HDR for combining different scans to capture a longer density range from the original photograph. The latest version gives you a lot more control over precisely how different tones get assigned when images get blended. There is even a calibration method for producing custom merging curves from test images you generate on your own equipment.