

ND FILTER

grads and their bulky adapters can be cumbersome to use and it's easy to miss a magical moment. Fortunately, images like the one from Banff can be rescued with the digital darkroom. The second image from Banff illustrates the possibilities. What a difference!

Banff National Park

The original slide was scanned into Photoshop 5.5 with a Nikon LS 2000 film scanner. **First, we selected the overexposed areas of sky and mountain and then the underexposed trees in the foreground with the Color Range tool and copied these selections to three separate layers (sky, mountain and trees)** using Layer>New>Layer Via Copy. The selections were blended slightly with the Feather tool before copying to blend them smoothly with adjacent areas.

The next step used the Blending mode in the Layers palette, which affects how the pixels in a layer interact with other layers. When the Blending mode is set to Normal, the active layer doesn't affect the layer below. However, click the arrow next to Normal, select Multiply from the list of possibilities, and watch the change! The color values of the pixels on the active layer have been multiplied by those on the layer beneath, adding density and saturation. Note that in Multiply mode, however, pure blacks and whites are unaffected.

We adjusted the strength of the Multiply effect in each layer with the Opacity slider: 100% opacity on the sky layer, 62% on the mountain layer. This is sort of like using a two-stop grad on the sky and a one-stop grad on the mountain. Try that in the field! For the tree layer, we used the Screen Blending mode and set the opacity to 88% to restore detail in the shadows.

Multiple layers provide flexibility in adjusting an image, but they significantly increase file size. The adjusted Banff image was almost 100 MB in size. Flattening the layers reduces file size, but if you want to go back and make further adjustments, save the file with all layers intact.

To rescue shots like the Banff photo, it helps to start with a reasonably good image that has detail in the highlights and shadows. If the image is so badly exposed that extreme adjustments are

required, it may be impossible to achieve good results. Images with strong composition but modest exposure problems make good candidates for this technique.

The Great Smoky Mountains

The second image was taken in the Great Smoky Mountains. The stacking of the mountains is visually interesting, but the image is overexposed. In the field, a colored grad would have added density and color to the scene. On the computer, Photoshop's Multiply blending technique can build needed density, but only with the colors left in the overexposed original image.

New colors may be introduced into the image and applied wherever the photographer chooses using the Gradient tool. In the Smokies image, a smoky blue color was added to the mountains and yellow to the sky to enhance the sunrise. The result doesn't precisely reflect the actual scene, but the image is significantly improved visually.

To start, we added a transparent layer to the original image by using Layer>New>Layer. We chose colors for the gradient (that would be used in the blank layer) by selecting the eyedropper and clicking it on the Foreground color square at the bottom of the toolbar. Up popped the Color Picker. We slid the arrows on the color bar (to the right of the large box) to the desired color, in this case, blue. Then we moved the cursor to the desired shade of blue in the color box and clicked OK. The foreground square on the tool bar turns the same color as the color you select. We repeated the process with the background square to yellow for the Smokies image.

If you want to stay closer to the original image, you can also select a cool color and a warm color in the original image by clicking the eyedropper on a color in the photo first. Then, when you click on the foreground or background square, the color picker will already give you a selected color in the color box. Move the circle up and to the right to make it richer.

Next, we clicked the Linear Gradient tool (on the toolbar) which, coincidentally, looks like a real graduated filter. This caused the Options palette to appear with the default setting of foreground to background color (blue to yellow in our example). We then clicked on the Edit button in the Gradient Options palette to customize the gradient. A bar

appeared with an ink bottle at each end and a diamond above it in the middle. The bottles represent the colors of the gradient; the position of the diamond controls how the colors fade from one to the other.

A third bottle was added by clicking below the gradient bar, which by default was the same blue as the foreground. This made most of the gradient bar solid blue. The diamond between blue and yellow was clicked and slid to the right, which made the transition to yellow occur further toward the right end.

Once the gradient colors were set, they were applied to the transparent layer by clicking on a starting point, dragging the mouse to an endpoint and letting go. In this image, it was dragged from the bottom center along a diagonal line to the top right of the image. This placed the blue over the mountains and the small portion of yellow over the sky where the sun was rising. If the color gradient doesn't come out quite right, just undo the action and try it again using different start and finish points.

The transparent layer filled with solid blue and yellow, obscuring the image on the background layer. **In the layers palette, the blending mode was changed from Normal to Multiply.** The colors of the gradient layer blended with the layer beneath. The background image became visible with the colors added by the gradient. The opacity of the blending was adjusted with the slider.

If the colors of the gradient don't look right, try another combination. A little experimentation can produce realistic results. In this case, the gradient was initially applied to the entire scene. The foreground trees became very dark and had a blue cast. To avoid this, the mountains and sky (but not the trees) were selected and copied to a new layer. The gradient was applied only to this area, leaving the trees unaffected. This situation exposes a common downfall of real graduated ND filters. When trees stick into a part of the image that's darkened, the trees are dark at the top but light at the base, a dead giveaway that a filter was used.

The art of photography has expanded. The click of the shutter no longer finalizes the artistic process for a color image. The first shot is analogous to a writer's rough draft, an artist's sketch. Only a beginning, it can be reworked until the artist is satisfied. OP