

11 PAINTING WITH THE MIXER BRUSH

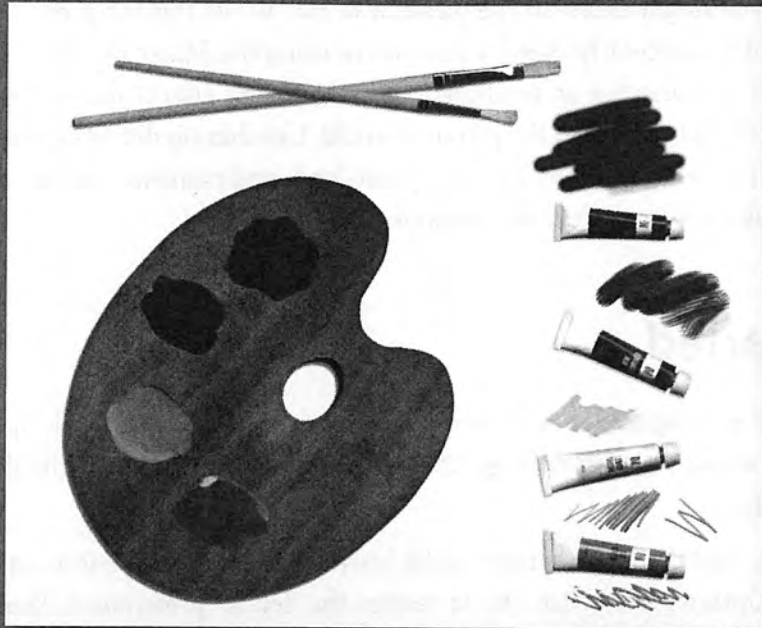
Lesson overview

In this lesson, you'll learn how to do the following:

- Customize brush settings.
- Clean the brush.
- Mix colors.
- Use an erodible tip.
- Create a custom brush preset.
- Use wet and dry brushes to blend color.



This lesson will take about an hour to complete. Copy the Lesson11 folder onto your hard drive if you have not already done so. As you work on this lesson, you'll preserve the start files. If you need to restore the start files, copy them again from the *Adobe Photoshop CS6 Classroom in a Book* DVD.



The Mixer Brush tool gives you flexibility, color-mixing abilities, and brush strokes as if you were painting on a physical canvas.

About the Mixer Brush

In previous lessons, you've used brushes in Photoshop to perform various tasks. The Mixer Brush is unlike other brushes in that it lets you mix colors with each other. You can change the wetness of the brush and how it mixes the brush color with the color already on the canvas.

Photoshop brushes have realistic bristles, so you can add textures that resemble those in paintings you might create in the physical world. While this is a great feature in general, it's particularly useful when you're using the Mixer Brush. In Photoshop CS6, you can also use an erodible tip to achieve the effects you might get with charcoal pencils and pastels in the physical world. Combining different bristle settings and brush tips with different wetness, paint-load, and paint-mixing settings gives you opportunities to create exactly the look you want.

Getting started

In this lesson, you'll get acquainted with the Mixer Brush as well as the brush tip and bristle options available in Photoshop CS6. Start by taking a look at the final projects you'll create.

- 1 Start Photoshop, and then immediately hold down Ctrl+Alt+Shift (Windows) or Command+Option+Shift (Mac OS) to restore the default preferences. (See "Restoring default preferences" on page 4.)
- 2 When prompted, click Yes to delete the Adobe Photoshop Settings file.
- 3 Choose File > Browse In Bridge to open Adobe Bridge.
- 4 In Bridge, click Lessons in the Favorites panel. Double-click the Lesson11 folder in the Content panel.
- 5 Preview the Lesson11 end files. You'll use the palette image to explore brush options and learn to mix colors. You'll then apply what you've learned to transform the landscape image into a watercolor.
- 6 Double-click 11Palette_start.psd to open the file in Photoshop.
- 7 Choose File > Save As, and name the file **11Palette_working.psd**. Click OK if the Photoshop Format Options dialog box appears.

● **Note:** If you plan to do a lot of painting in Photoshop, consider using a tablet, such as a Wacom tablet, instead of a mouse. Photoshop can sense the way you hold and use the pen to change the brush width, strength, and angle on the fly.



Selecting brush settings

The image includes a palette and four tubes of color, which you'll use to sample the colors you're working with. You'll change settings as you paint different colors, exploring brush tip settings and wetness options.

- 1 Select the Zoom tool (Q), and zoom in to see the tubes of paint.
- 2 Select the Eyedropper tool (I), and sample the red color from the red tube. The foreground color changes to red.
- 3 Select the Mixer Brush tool (M), hidden under the Brush tool (B).

Note: If you have OpenGL enabled, Photoshop displays a sampling ring so you can preview the color you're picking up.



- 4 Choose Window > Brush to open the Brush panel. Select the first brush.

The Brush panel contains brush presets and several options for customizing brushes.



Experiment with wetness options and brushes

The effect of the brush is determined by the Wet, Load, and Mix fields in the options bar. Wet controls how much paint the brush picks up from the canvas. Load controls how much paint the brush holds when you begin painting (as with a physical brush, it runs out of paint as you paint with it). Mix controls the ratio of paint from the canvas and paint from the brush.

You can change these settings separately. However, it's faster to select a standard combination from the pop-up menu.

- 1 In the options bar, choose Dry from the pop-up menu of blending brush combinations.



When you select Dry, Wet is set to 0%, Load to 50%, and Mix is not applicable. With the Dry preset, you paint opaque color; you cannot mix colors on a dry canvas.

- 2 Paint in the area above the red tube. Solid red appears. As you continue painting without releasing the mouse, the paint eventually fades and runs out.



- 3 Sample the blue color from the blue tube of paint. You can use the Eyedropper tool or Alt-click (Windows) or Option-click (Mac OS) to sample the color. If you use the Eyedropper tool, return to the Mixer Brush tool after you sample the color.
- 4 In the Brush panel, select the round fan-shaped brush. Choose Wet from the pop-up menu in the options bar.

- 5 Paint above the blue tube. The paint mixes with the white background.



- 6 Choose Dry from the menu in the options bar, and then paint again above the blue tube. A much darker, more opaque blue appears, and doesn't mix with the white background.

The bristles from the fan brush you selected are much more apparent than the bristles you Shape used originally. Changing bristle qualities makes a big difference in the texture you paint.

- 7 In the Brush panel, decrease the number of bristles to 40%. Paint a little more with the blue brush to see the change in texture. The bristles are much more obvious in the stroke.



► **Tip:** The Bristle Brush Preview shows you the direction of the bristles as you paint. To show or hide the Bristle Brush Preview, click the Toggle The Bristle Brush Preview button at the bottom of the Brush or Brush Presets panel. The Bristle Brush Preview is available only with OpenGL enabled.

● **Note:** When you use Alt-click or Option-click to load paint from the canvas, the brush picks up any color variation in the sample area. If you want to sample only solid colors, select Load Solid Colors Only in the Current Brush Load menu in the options bar.

- 8 Sample the yellow color from the yellow paint tube. In the Brush panel, select the flat-point brush with fewer bristles (the one to the right of the fan brush). Choose Dry from the menu in the options bar, and then paint in the area over the yellow paint tube.

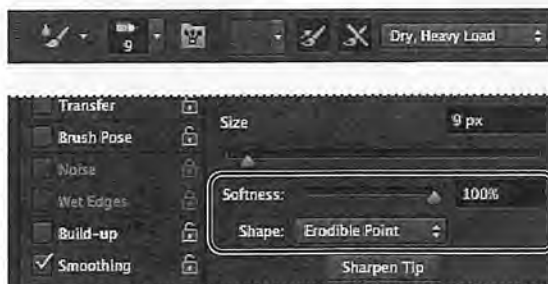


- 9 Choose Very Wet from the menu in the options bar, and then paint some more. Now the yellow mixes with the white background.

Use an erodible tip

In Photoshop CS6, you can choose an erodible tip, so that the width of the brush changes as you paint. Erodible tips are represented in the Brush panel by pencil icons, because in the physical world, pencils and pastels have erodible tips. You'll experiment with erodible point and flat tips.

- 1 Sample the green color from the green paint tube, and choose Dry, Heavy Load in the options bar.
- 2 Select an Erodible Point brush. Change its Size to 9 px, and Softness to 100%. The Softness value determines how quickly the tip erodes. A higher value results in faster erosion.
- 3 Draw a zig-zag line above the green paint tube.



The line gets thicker as the tip erodes.

- 4 Click Sharpen Tip in the Brush panel, and then draw a line next to the one you just drew.



The sharper tip draws a much narrower line.

- 5 Choose Erodible Triangle from the Shape menu in the Brush panel, and draw a zig-zag line with it.

You can choose from several erodible tips, depending on the effect you want.



Mixing colors

You've used wet and dry brushes, changed brush settings, and mixed the paint with the background color. Now, you'll focus more on mixing colors with each other as you add paint to the painter's palette.

- 1 Zoom out just enough to see the full palette and the paint tubes.
- 2 Select the Paint mix layer in the Layers panel, so the color you paint won't blend with the brown palette on the Background layer.

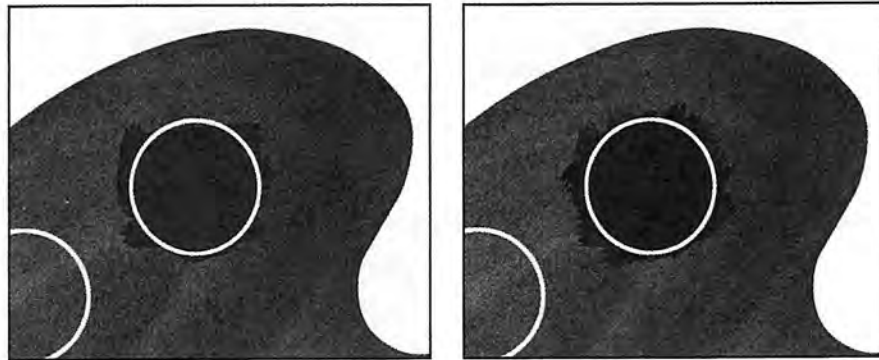
The Mixer Brush tool mixes colors only on the active layer unless you select Sample All Layers in the options bar.

● **Note:** Depending on the complexity of your project, you may need to be patient. Mixing colors can be a memory-intensive process.

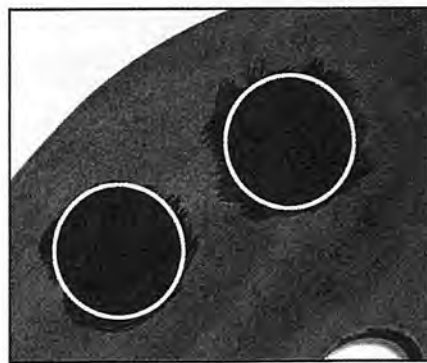
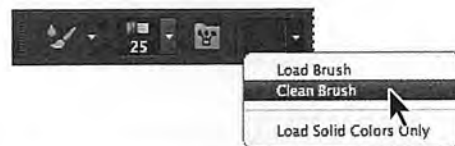
- 3 Sample the red color from the red paint tube. Select the round blunt brush in the Brush panel (the fifth brush). Then select Wet from the pop-up menu in the options bar, and paint in the top circle on the palette.
- 4 Click the Clean Brush After Every Stroke icon in the options bar to deselect it.



- 5 Sample the blue color from the blue paint tube, and then paint in the same circle, mixing the red with the blue to make purple.



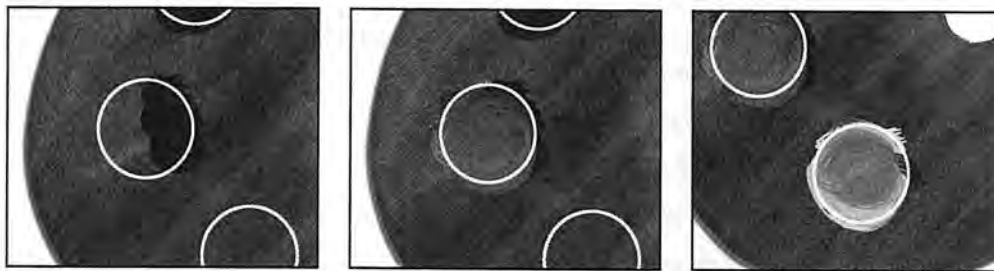
- 6 Paint in the next circle. You're painting in purple because the paint stays on the brush until you clean it.
- 7 In the options bar, choose Clean Brush from the Current Brush Load pop-up menu. The preview changes to indicate transparency, meaning the brush has no paint loaded.



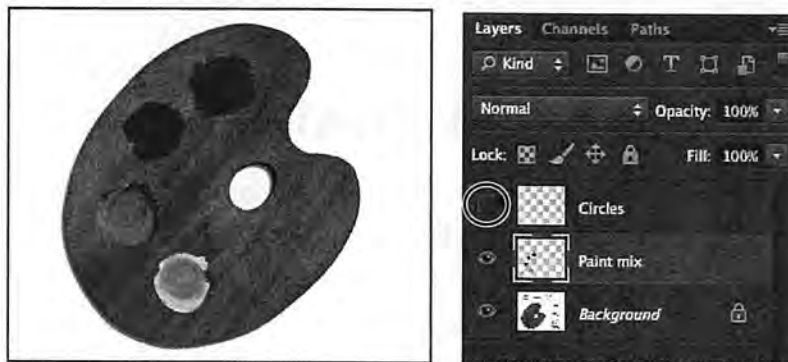
To remove the paint load from a brush, you can choose Clean Brush in the options bar. To replace the paint load in a brush, sample a different color.

If you want Photoshop to clean the brush after each stroke, select the Clean Brush icon in the options bar. To load the brush with the foreground color after each stroke, select the Load Brush icon in the options bar. By default, both of these options are selected.

- 8 Choose Load Brush from the Current Brush Load pop-up menu in the options bar to load the brush with blue paint. Paint blue in half of the next circle.
- 9 Sample the yellow color from the yellow paint tube, and paint over the blue with a wet brush to mix the two colors.
- 10 Fill the last circle with yellow and red paint, mixing the two with a wet brush to create an orange color.



- 11 Hide the Circles layer in the Layers panel to remove the outlines on the palette.



- 12 Choose File > Save.

Julianne Kost is an official Adobe Photoshop evangelist.



Tool tips from the Photoshop evangelist

Mixer Brush shortcuts

There are no default keyboard shortcuts for the Mixer Brush tool, but you can create your own.

To create custom keyboard shortcuts:

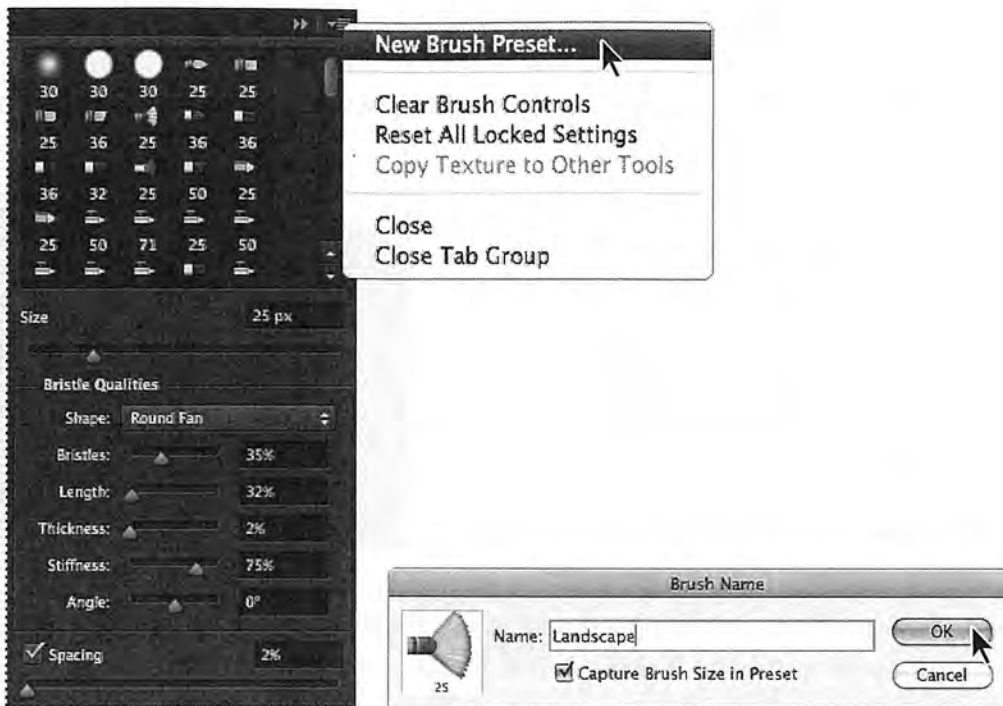
- 1 Choose Edit > Keyboard Shortcuts.
- 2 Choose Tools from the Shortcuts For menu.
- 3 Scroll down to the bottom of the list.
- 4 Select a command, and then enter a custom shortcut. You can create shortcuts for the following commands:
 - Load Mixer Brush
 - Clean Mixer Brush
 - Toggle Mixer Brush Auto-Load
 - Toggle Mixer Brush Auto-Clean

Creating a custom brush preset

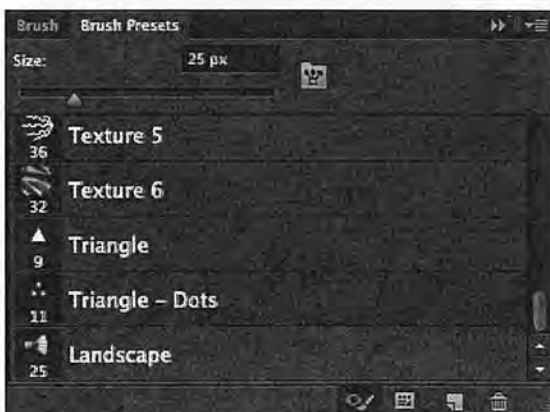
Photoshop includes numerous brush presets, which are very handy. But if you need to tweak a brush for your project, you might find it easier to create your own preset. You'll create a brush preset to use in the following exercise.

- 1 In the Brush panel, select the following settings:
 - Size: **36 px**
 - Shape: Round Fan
 - Bristles: **35%**
 - Length: **32%**
 - Thickness: **2%**
 - Stiffness: **75%**
 - Angle: **0%**
 - Spacing: **2%**

- 2 Choose New Brush Preset from the Brush panel menu.
- 3 Name the brush **Landscape**, and click OK.



- 4 Click Brush Presets in the Brush panel to open the Brush Presets panel.
- The Brush Presets panel displays samples of the strokes created by different brushes. If you know which brush you want to use, it can be easier to find by name. You'll list them by name now, so you can find your preset for the next exercise.
- 5 Choose Large List from the Brush Presets panel menu.
 - 6 Scroll to the bottom of the list. The preset you created, named Landscape, is the last preset in the list.



- 7 Close the 11Palette_working.psd file.

Mixing colors with a photograph

Earlier, you mixed colors with a white background and with each other. Now, you'll use a photograph as your canvas. You'll add colors and mix them with each other and with the background colors to transform a photograph of a landscape into a watercolor.

- 1 Choose File > Open. Double-click the 11Landscape_Start.jpg file in the Lesson11 folder to open it.
- 2 Choose File > Save As. Rename the file **11Landscape_working.jpg**, and click Save. Click OK in the JPEG Options dialog box.



You'll paint the sky first. Start by setting up the color and selecting the brush.

- 3 Click the Foreground color swatch in the Tools panel. Select a medium-light blue color (we chose R=185, G=204, B=228), and then click OK.
- 4 Select the Mixer Brush tool (✓), if it isn't already selected. Choose Dry from the pop-up menu in the options bar. Then select the Landscape brush from the Brush Presets panel.

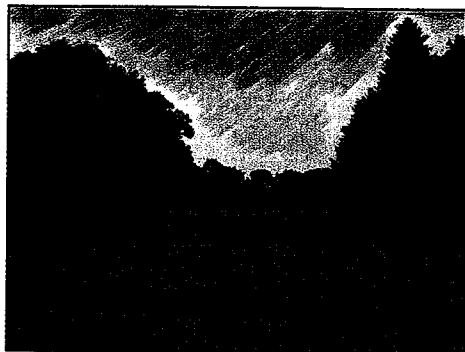
Presets are saved on your system, so they're available when you work with any image.

- 5 Paint over the sky, moving in close to the trees. Because you're using a dry brush, the paint isn't mixing with the colors beneath it.

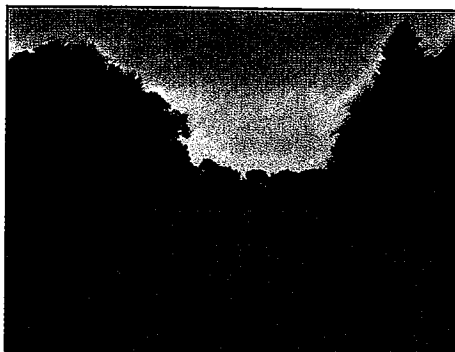


- 6 Select a darker blue color (we used R=103, G=151, B=212), and add darker color at the top of the sky, still using the dry brush.

- 7 Select a light blue color again, and choose Very Wet, Heavy Mix from the pop-up menu in the options bar. Use this brush to scrub diagonally across the sky, blending the two colors in with the background color. Paint in close to the trees, and smooth out the entire sky.



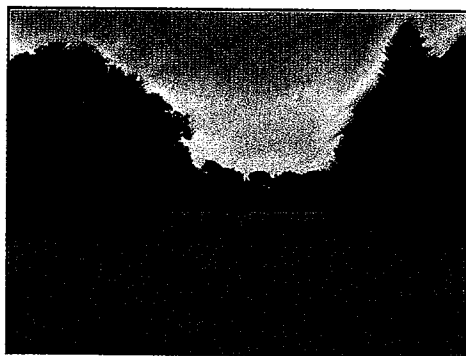
Adding a darker color with a dry brush



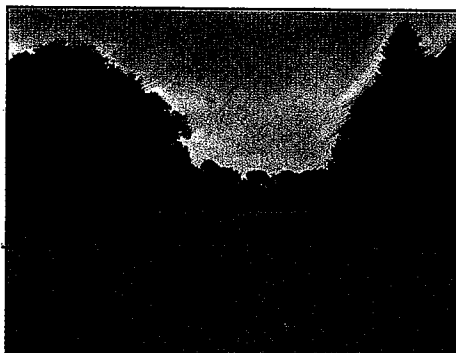
Blending colors with a wet brush

When you're satisfied with the sky, move on to the grass and trees.

- 8 Select a light green (we used R=92, G=157, B=13). Choose Dry from the pop-up menu in the options bar. Then, paint along the top section of the grass to highlight it.
- 9 Sample a darker green from the grass itself. Choose Very Wet, Heavy Mix in the options bar. Then paint using diagonal strokes to blend the colors in the grass.



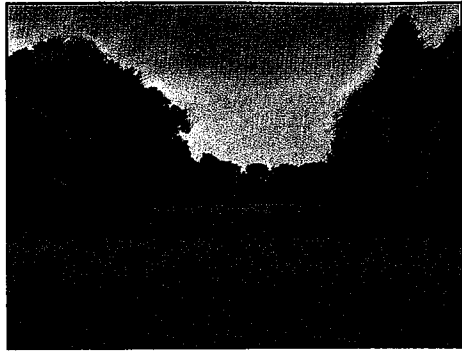
Adding light green with a dry brush



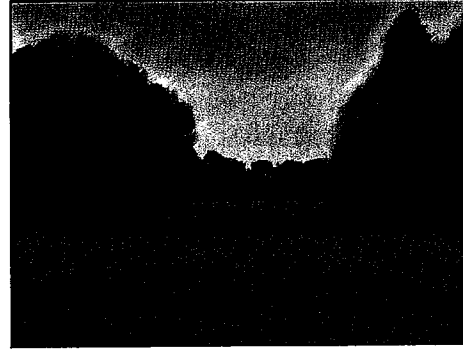
Blending colors with a wet brush

- 10 Sample a light green, and then use a dry brush to highlight the lighter areas of the trees and the small tree in the middle of the landscape. Then select a dark green (we used R=26, G=79, B=34), and choose Very Wet, Heavy Mix in the options bar. Paint with the wet brush to mix together the colors in the trees.

► **Tip:** Remember that you can Alt-click (Windows) or Option-click (Mac OS) to sample a color instead of using the Eyedropper tool. To sample only solid colors using the keyboard shortcut, choose Load Solid Colors from the Current Brush Load pop-up menu in the options bar.



Highlighting the trees



Mixing the colors

► **Tip:** For different effects, paint in different directions. With the Mixer Brush tool, you can go wherever your artistic instincts lead you.

So far, so good. The background trees and the brown grasses are all that remain to be painted.

- 11** Select a bluer color for the background trees (we used R=65, G=91, B=116). Paint with a dry brush to add the blue at the top. Then choose **Wet** in the options bar, and paint to mix the blue into the trees.
- 12** Sample a brown color from the tall grasses, and then select **Very Wet, Heavy Mix** in the options bar. Paint along the top of the tall grass with up-and-down strokes for the look of a field. Across the back area, behind the small center tree, paint back and forth to create smooth strokes.



Voilà! You've created a masterpiece with your paints and brushes, and there's no mess to clean up.

Brush variations

You can go beyond the settings in these projects to explore numerous variations in brush tips and settings. In particular, you may want to play with Brush Pose and Shape Dynamics options.

Brush Pose settings change the tilt, rotation, and pressure of the brush. In the Brush panel, select Brush Pose from the list on the left. Move the Tilt X slider to tilt the brush from left to right. Move the Tilt Y slider to tilt the brush forward and backward. Change the Rotation value to rotate the bristles. (Rotation is more obvious when using a flat fan-shaped brush, for example.) Change the Pressure setting to determine how much effect the brush has on the artwork.

Shape Dynamics settings affect the steadiness of the stroke. Move the sliders up to increase the variability in the stroke.

If you're using a Wacom tablet, Photoshop recognizes the angle and pressure of the pen you're using and applies them to the brush. You can use the pen to control such things as Size Jitter; choose Pen Pressure or Pen Tilt from the Control menu in the Shape Dynamics settings to determine how the value changes.

There are many more options—some subtle, some not so subtle—to create variety in brush effects. Which options are available depend on the brush tip shape you've selected. For more information about all the options, see Photoshop Help.

Painting gallery

The painting tools and brush tips in Photoshop CS6 let you create all kinds of painting effects.

Erodible brush tips give an added realism to your art. The following pages show examples of art created with the new brush tips and tools in Photoshop CS6.



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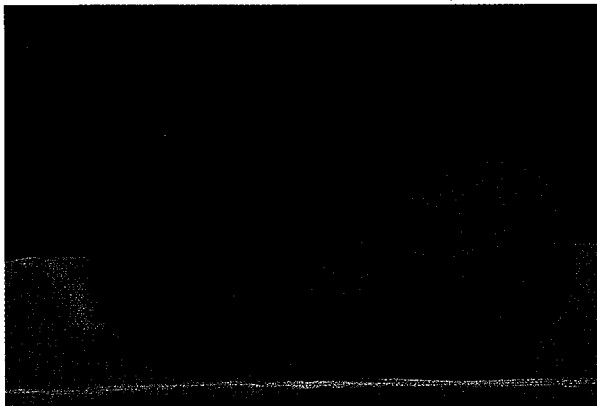


Image © Victoria Pavlov

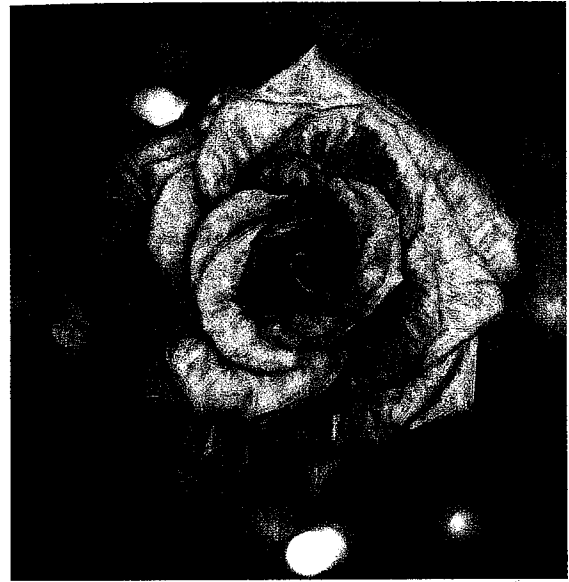


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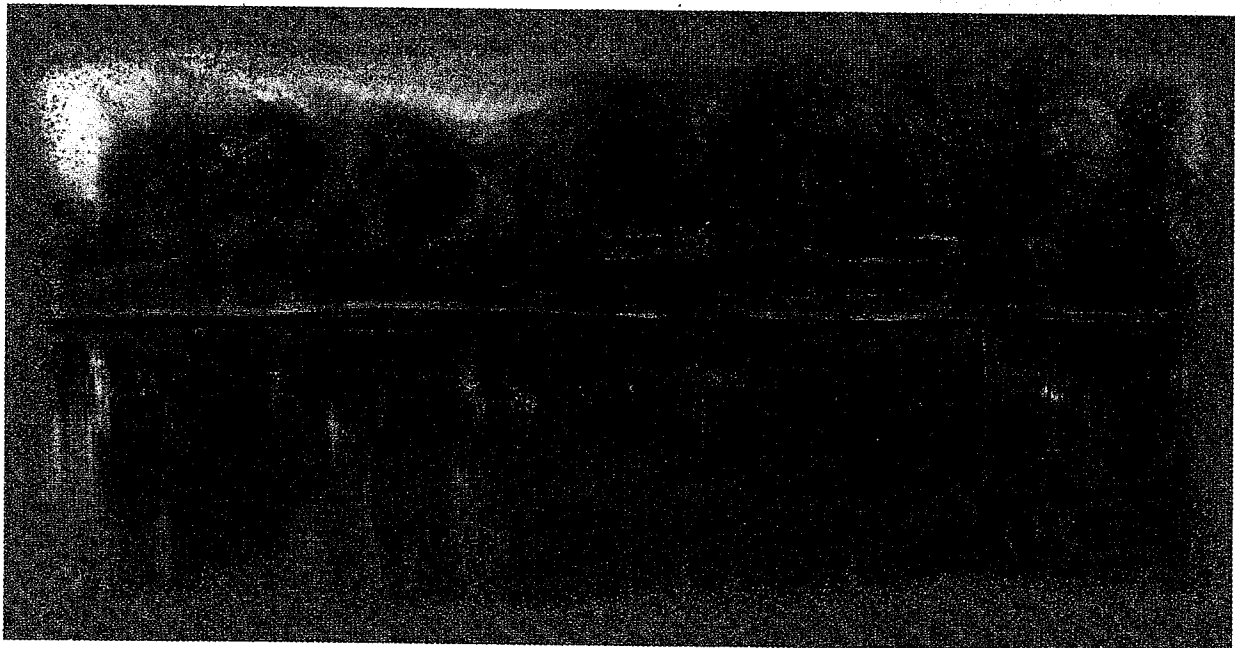


Image © John Derry

Review questions

- 1 What does the Mixer Brush do that other brushes don't?
- 2 How do you load a mixer brush?
- 3 How do you clean a brush?
- 4 How can you display the names of brush presets?
- 5 What is the Bristle Brush Preview, and how can you hide it?
- 6 What is an erodible tip?

Review answers

- 1 The Mixer Brush mixes the color of the paintbrush with colors on the canvas.
- 2 You can load a mixer brush by sampling a color, either by using the Eyedropper tool or keyboard shortcuts (Alt-click or Option-click). Or, you can choose Load Brush from the pop-up menu in the options bar to load the brush with the foreground color.
- 3 To clean a brush, choose Clean Brush from the pop-up menu in the options bar.
- 4 To display brush presets by name, open the Brush Presets panel, and then choose Large List (or Small List) from the Brush Presets panel menu.
- 5 The Bristle Brush Preview shows you the direction the brush strokes are moving. It's available if OpenGL is enabled. To hide or show the Bristle Brush Preview, click the Toggle The Bristle Brush Preview icon at the bottom of the Brush panel or the Brush Presets panel.
- 6 An erodible tip erodes, changing thickness, as you paint or draw. It's similar to the way a pencil or pastel tip changes shape as it erodes.

