# 10 <br> 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.
- Create a custom brush preset.
- Use wet and dry brushes to blend color.

This lesson will take about an hour to complete. Please log in to your account on peachpit.com to download the lesson files for this chapter, or go to the Getting Started section at the beginning of this book and follow the instructions under "Accessing the Lesson Files and Web Edition."

As you work on this lesson, you'll preserve the start files. If you need to restore the start files, download them from your Account page.


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

- Note: If Bridge isn't installed, you'll be prompted to install it when you choose Browse In Bridge. For more information, see page 3.
- Note: If you use Photoshop for digital painting, consider using a graphics tablet with a pressure-sensitive stylus, such as a Wacom Intous. If your stylus transmits information such as pressure, angle, and rotation, Photoshop can apply that data to your brush as you paint.


## 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.

Some Photoshop brush types can 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. 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. 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) to restore the default preferences. (See "Restoring Default Preferences" on page 5.)

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 Lesson10 folder in the Content panel.

5 Preview the Lesson10 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 painting.

6 Double-click 10Palette_Start.psd to open the file in Photoshop.

7 Choose File > Save As, and name the file 10Palette_Working.psd. Click OK if the Photoshop Format Options dialog box appears.


8 Click the Choose a Workspace icon at the top right corner of the application frame, and choose the Painting workspace.


## Selecting brush settings

The practice 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 ( $($ ) , and click the red tube to sample its color.
The foreground color changes to red.
 is selected, you may find the Mixer Brush hidden under the Brush tool [ $[\cdot]$.)


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

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


- Note: When you hold down the Eyedropper tool on the image, Photoshop displays a sampling ring that previews the color you're selecting. The sampling ring is available if Photoshop can use the graphics processor on your computer (see the Performance panel in Photoshop preferences).

Tip: Looking for a specific brush name in the Brush Settings panel? Hover the pointer over a brush thumbnail, and its name will pop up in a tool tip.

- Note: You can also sample paint by Alt-clicking or Optionclicking the Mixer Brush tool. This samples the area within the brush size as an image, unless you selected Load Solid Colors Only in the Current Brush Load menu in the options bar.


## Experimenting 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 With the Eyedropper tool, sample the blue color from the blue tube of paint.
4 Select the Mixer Brush. For the blue paint, in the Brush Settings panel we chose the Round Sketch Ballpoint Pen 50 brush (the first brush in the second row). Choose Wet from the pop-up menu in the options bar.

If the brush you select doesn't match the one shown here, resize the Brush Settings panel so that the brush thumbnails display six columns across.

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.

7 Sample the yellow color from the yellow paint tube, and then select the Mixer brush. For the yellow paint, in the Brush Settings panel we chose the Pencil KTW 1 brush 35 (the fourth brush in the second row). Choose Dry from the menu in the options bar, and then paint in the area over the yellow paint tube.


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

9 Sample the green color from the green paint tube, and then select the Mixer brush. For the green paint, in the Brush Settings panel we chose the Hard Round 30 brush (the sixth brush in the fifth row). Choose Dry from the menu in the options bar.

10 Draw a zigzag line above the green paint tube.

Note: If you aren't getting the same results from the brushes, make sure the Background layer is selected in the Layers panel.

- Note: If the brushes in your Brush Settings panel don't match the ones shown in this chapter, open the Brushes panel, Shiftselect all brushes and brush folders in the list, click the Delete Brush button, click OK to confirm, and then choose Restore Default Brushes from the Brushes panel menu.


## Mixing colors

- Note: Depending on the complexity of your project and the performance of your computer, you may need to be patient. Mixing colors can be an intensive process.
zip: If the paint tubes are covered by the Brush Settings panel, feel free to rearrange your workspace to make room. For example, collapse or close panels you aren't using. But make sure you can still see the Layers panel.

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 optionsbar.

3 Use the Eyedropper tool to sample the red color from the red paint tube, and then select the Mixer brush. In the Brush Settings panel, select the SoftRound 30 brush (the first brush in the first row). Then choose Wet from the pop-up menu in the options bar, and paint in the top circle on the palette.

4 Click the Clean The Brush After Each Stroke icon (X) in the options bar to deselect it.


5 Use the Eyedropper tool to sample the blue color from the blue paint tube, and then use the Mixer Brush tool to paint in the same circle, mixing the red with the blue until the color becomes purple.

You can use the Eyedropper tool to sample a color when the layer that contains the color (in this case, the Background layer) isn't selected.


6 Use the Eyedropper tool to sample the purple color from the circle you just painted, and then paint in the next circle.

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 After Each Stroke icon $(\diamond)$ in the options bar. To load the brush with the foreground color after each stroke, select the Load Brush After Each Stroke icon(' ) in the options bar. By default, both of these options are selected.

8 Use the Eyedropper tool to sample the blue color from the blue paint tube, and then paint blue in half of the next circle.

9 Sample the yellow color from the yellow paint tube, and slowly 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.


Tip: Use the Eyedropper tool to sample the color, since it's on a different layer.

11 Hide the Circles layer in the Layers panel to remove the outlines on the palette. You've mixed paint colors on a digital palette!


12 Choose File > Save, and close the document.

Julieanne 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
- Toggle Mixer Brush Sample All Layers
- Sharpen Erodible Tips


## Mixing colors with a photograph

When you come up with a great brush, you probably want to save all of its settings so that you can use that brush again in a later project. While Photoshop already has a Tool Preset feature that lets you save tool settings, brushes have more options than most tools. For this reason, Photoshop has convenient Brush Presets that can remember everything about a brush.

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 painting.

1 Choose File > Open. Double-click the 10Landscape_Start.jpg file in the Lesson10 folder to open it.

2 Choose File > Save As. Rename the file 10Landscape_Working.jpg, and click Save. Click OK in the JPEG Options dialog box.

Photoshop includes numerous brush presets, which are very handy. But if you
 need a different brush for your project, you might find it easier to create your own brush preset or download brush presets that another artist has created and shared online. In the following exercises, you'll load, edit, and save custom brush presets.

## Loading custom brush presets

The Brushes panel displays visual samples of the strokes created by different brushes. If you already know the name of the brush you want to use, it can be easier to display the brushes by name. You'll list them by name now, so you can find your preset for the next exercise.

1 Open the Brushes panel, and then expand one of the brush preset groups to see how the brushes are organized.

Now you'll load brush presets that you'll use for this exercise. Loading brush presets is how you use brush presets that

Tip: If you've used earlier versions of Photoshop, you'll find that the Brush Presets in Photoshop CC 2018 are simpler and more powerful than in previous versions. you've downloaded or purchased from another artist.


Tip: If you want to share your custom brushes with others or back them up, select the brushes or brush groups, and choose Export Selected Brushes from the Brushes panel menu.

2 Click the Brushes panel menu, and choose Import Brushes.
3 Navigate to the Lesson 10 folder, select CIB Landscape Brushes.abr, and click Open or Load. The CIB Landscape Brushes group appears at the end of the Brushes panel list.

4 Click to expand the CIB Landscape Brushes group, revealing the brushes it contains.

Some of the presets contain not only a stroke preview and a name, but also a color swatch. That's because a color can be part of a brush preset.


## Creating a custom brush preset

For the exercise next exercise, you'll create and save a variation on a brush preset that exists in the CIB Landscape Brushes you just imported.

1 Select the Mixer Brush, and then, in the CIB Landscape Brushes group in the Brushes panel, select the Round Fan Brush. You'll use this brush preset as the starting point for the brush preset you'll create.

2 Change the following settings in the Brush Settings panel:

- Size: 36px
- Shape: RoundFan
- Bristles: 35\%
- Length: 32\%
- Thickness: 2\%
- Stiffness: 75\%
- Angle: $\mathbf{0}^{\circ}$
- Spacing: 2\%


3 Click the Foreground color swatch in the Tools panel. Select a medium-light blue color (we chose $\mathrm{R}=86, \mathrm{G}=201, \mathrm{~B}=252$ ).

4 In the options bar, choose Dry.


Now it's time to save the settings as a brush preset.
5 Choose New Brush Preset from the Brush Settings panel menu.
6 Name the brush Sky Brush, select all of the options in the New Brush dialog box, and then click OK.


Your new brush is saved in the CIB Landscape Brushes group because it was based on a brush preset from that group. Feel free to reorganize your brush presets any way you like by dragging and dropping presets into brush preset groups within the Brushes panel. You can create a brush preset group by clicking the Create a New Group button ( Dat the bottom of the Brushes panel. You can change the order of the Brushes panel list and organize brush preset groups into subgroups.

## Painting and mixing colors with brush presets

You'll paint the sky first, using the brush preset you just created.
1 Select the Sky Brush from the Brushes panel.
Presets are saved on your system, so they're available when you work with any image.
2 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.


3 Select the CloudsBrush.
4 Use this brush to scrub diagonally in the upper right corner of the sky, blending the two colors with the background color.


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

## Live Tip Brush Preview

When you use a brush with a bristle tip, the Live Tip Brush Preview helps you visualize interactive brush attributes, such as the direction of the bristles as you paint, especially when using a stylus that supports features such as tilt angle.


To show or hide the Live Tip Brush Preview, click the Toggle The Live Tip Brush Preview button at the bottom of the Brushes or Brush Settings panel. The default Photoshop brushes don't display the Live Tip Brush Preview because they don't use bristle tips, but the CIB Landscape Brushes do use bristle tips.

5 Select the Green Grass Highlight Brush. Then paint along the bright green sections of the grass to highlight them.


Note: The Live Tip Brush Preview is available if Photoshop supports the graphics processor on your computer (see the Performance panel in Photoshop preferences).

Tip: If you want to create less jittery strokes with the Mixer Brush, like near the edges of the trees, try increasing the Set Smoothing for Stroke percentage in the options bar.

6 Select the Foreground Tree Brush, and then paint the darker areas of the tree. Then select the Background Trees Brush, and paint the two smaller trees on the right side of the painting. Select the Tree Highlights Brush, and paint the lighter areas of the trees.


So far, so good. The brown grasses are all that remain to be painted.
7 Select the Brown Grass Brush. Paint along the brown grass with up-and-down strokes for the look of a field. Use the same brush to paint the trunk of the tree.
8 Select the Foreground Grass Brush. Then paint using diagonal strokes to blend the colors in the grass.

9 Choose File > Save, and close the document.


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

## Brushes from Kyle T. Webster



At the Adobe MAX conference in October 2017, Adobe announced that they had acquired KyleBrush.com, and that Kyle T. Webster, an international award-winning illustrator and leader in the field of digital brush creation, would also join Adobe. For those who don't know his work, Kyle has drawn for The New Yorker, TIME, The New York Times, The Wall Street Journal, The Atlantic, Entertainment Weekly, Scholastic, Nike, IDEO, and many other distinguished editorial, advertising, publishing, and institutional clients. His illustration work has been recognized by the Society of Illustrators, Communications Arts, and American Illustration. As part of the acquisition, Kyle will work closely with Adobe product teams on the development of future brushes for Adobe Creative Cloud.
"For years, Kyle has created the world's best-selling Photoshop brushes for professional illustrators, animators, and designers," said Maria Yap, Adobe Senior Director of Digital Imaging Product Management. "We're thrilled to bring hisaward-winning brushes to all Creative Cloud members and at the same time gain Kyle's expertise to enhance Adobe's digital drawing experience for designers in the future."
To add the Kyle T. Webster brushes to Photoshop, open the Brushes panel (Window > Brushes), and choose Get More Brushes from the Brushes panel menu. After you download a brush pack and with Photoshop running, double-click the downloaded ABR file to add its brushes as a new group in the Brushes panel.


Some of the brush packs available to download.


A small sample of the over 1,000 brushes available.

## Painting gallery

The painting tools and brush tips in Photoshop let you create all kinds of painting effects.
The following pages show examples of art created with the brush tips and tools in Photoshop.


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Continues on next page

## Painting gallery (continued)



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