



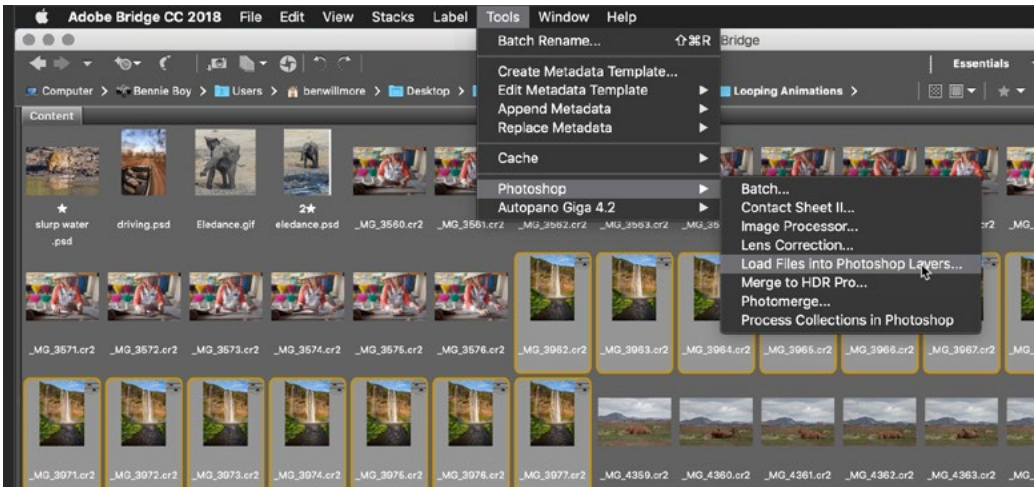
Looping Animations

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In this lesson, we're going to learn how to transform photographs into looping animations. This will introduce some motion into your photo and can be fun to use online.

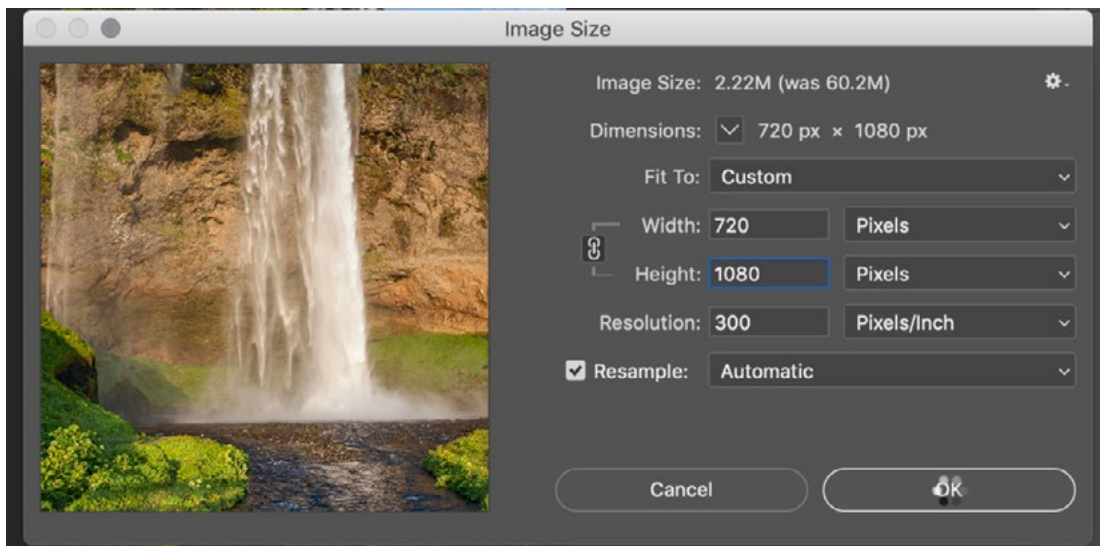
In order to create something like this, you will need to take a fairly quick succession of photos while keeping the camera as still as possible. It is ideal to use a tripod, but you can also get away with hand-holding the camera.

Load files to Photoshop layers After loading the images on your computer, you'll need to get the series of photos into a single Photoshop document. In Bridge, select all of the photos you would like to use in the animation, click on the Tools menu and choose Photoshop > Load Files into Photoshop Layers. (If you are using Lightroom, you would click on the Photo menu and choose Edit In > Open as Layers in Photoshop.) Photoshop will open and all of the images will be loaded as separate layers in a single document.



With all of the images selected in Bridge, we are using the Tools menu to Load the selected files as separate layers in a single Photoshop document.

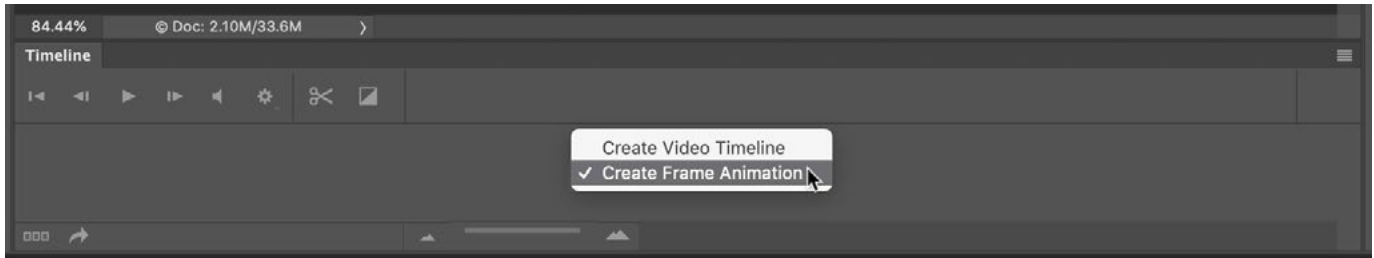
Making the file size smaller In the video example, we loaded raw files into the document. This is going to make for a huge document and will make things run slower when trying to turn the images into an animation. We will also need a small file size for uploading to the Internet. To make the image smaller, click on the Image menu and choose Image Size. When the Image Size dialog appears, make sure the unit menu is set to Pixels, change the size to 720 pixels by 1080 pixels (or something similar) and click OK.



Access the Image Size dialog via the Image menu. Here, you can change the size of your document. We are scaling down the document so that the file size becomes smaller.

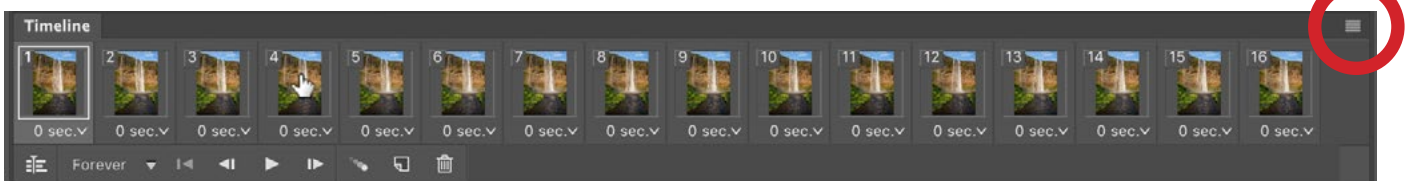
Aligning the layers If you shot the series of images using a tripod, this step will not be necessary. If you shot hand-held, however, you'll want to make sure that all of the images are perfectly aligned. To align all of the layers, first make sure that they are all selected. You can select all of the layers by clicking on the Select menu and choosing All Layers. Next, click on the Edit menu and choose Auto-Align Layers. A dialog box will appear, you can leave all of the settings at their default positions and then click OK. Now, Photoshop will align all of the layers based on the contents of each one. After Photoshop is done aligning the layers, there will likely be some transparent areas around the edges of the frame and you will need to use the Crop Tool to crop out those areas.

View the Timeline When making animations, you will need to have the Timeline visible on your screen. You can open it by clicking on the Window menu and choosing Timeline. It will likely appear along the bottom of the interface. The Timeline can create a frame animation, which is basically a sped-up slideshow, or it can create an actual video. Here, you will be using it to create a frame animation. Click on the little menu in the middle of the Timeline and choose Create Frame Animation. Then click the Create Frame Animation button. This will create the first frame in your animation and you will see it on the left side of the Timeline.

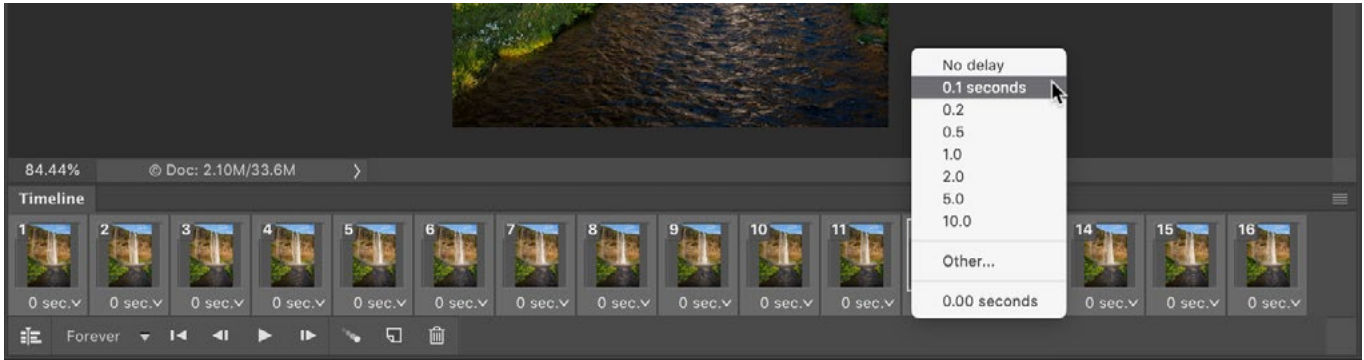


The Timeline panel is shown above and we are clicking on the menu in the middle and choosing to "Create Frame Animation."

The animation will be created by playing a slideshow of all the layers, so you'll need each layer to be added as a separate frame. Click on the little menu in the top right corner of the Timeline panel and choose to "Make Frames from Layers." You will see all of the frames appear within the Timeline. Click the Play button at the bottom of the Timeline to view the animation and then hit the Stop button to stop the animation. With default settings, the animation is usually too fast. You can see how long the animation will pause before moving to the next frame by looking at the number at the bottom of each frame. By default, it will say 0 seconds. This means that there will be no pause before moving to the next frame. Click on the number and a pop-up menu will appear, allowing you to choose how much time the slide will play for. In an animation like this, you'll want every frame to have the same time setting, so select all of the frames by clicking on the little menu in the top right corner of the Timeline and choosing to "Select All Frames." With all the frames selected, click on the bottom of any one of the frames to change the amount of time. This will change the time for all of the selected frames. In the video example, we set the time to 0.1 seconds. Click Play to view the results. You may have to experiment with different times in order to decide which looks best to you. If the time setting you want is not available in the little menu, choose "Other" and you will be allowed to manually enter in the desired time.



To get all of the layers loaded as individual animation frames, we clicked on the little side menu (circled) and chose to "Make Frames from Layers."



Change the duration of each frame by clicking on the little menu at the bottom of the frame thumbnail.

The more frames that you have in your animation, the larger the file size will be. If you have a lot of frames, you may want to assess the individual frames and decide whether there are any that don't add to the animation. You could then remove those by clicking on them to make them active and then clicking the little trash can icon at the bottom of the Timeline panel.

If your animation appears to be playing backwards, there is a way to reverse it. This happened with the video example of the animation of the waterfall. In our case, the mist seemed to be moving up instead of down. To reverse the frames, they must first all be selected. Then, click on the little menu in the top right corner of the Timeline panel and choose to "Reverse Frames."

Limiting the animation to part of the image You may have a series of images that you would like to turn into an animation, but you only want part of the image to be animated. In the video example, we have an animation of a leopard drinking water. We want the head and tongue to be animated, but we don't want the water or the rest of the cat's body to move. Let's look at how we can achieve that.

First, create the animation in the Timeline using the method we detailed above. Then, go to the Layers panel and turn on the visibility of one layer at a time, deciding which frame you like the most and would like to use as your "base image." Move this layer to the bottom of the layer stack in the Layers panel. Next, you'll need to add layer masks to the other layers, hiding the parts of the layers that you don't

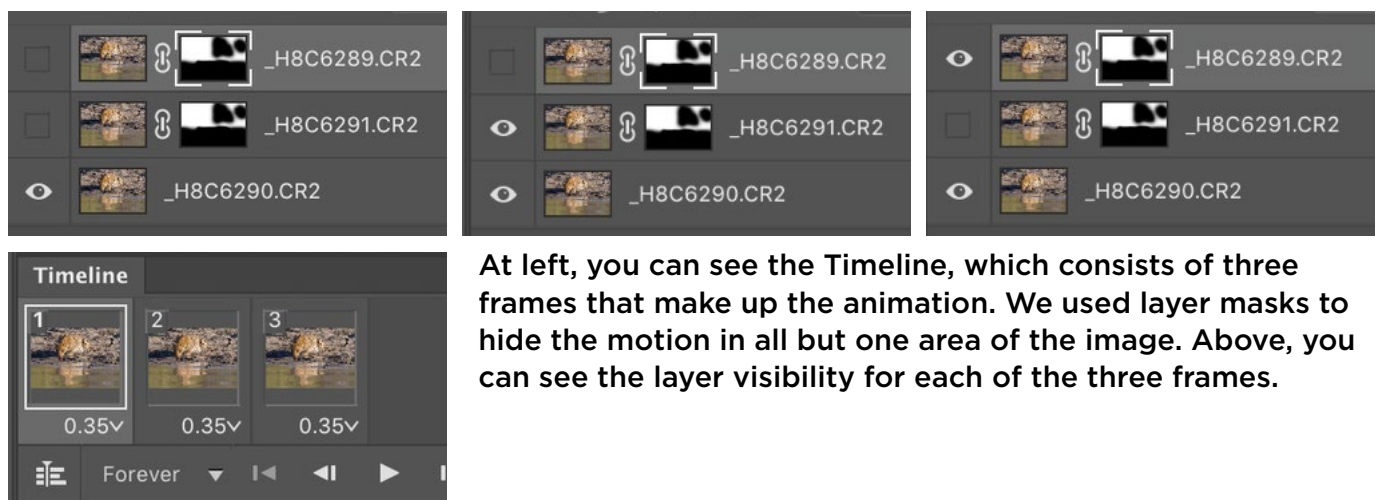
want to move. In our example, we painted with black on the layer masks, hiding the water, the tail and the body of the cat. If you'd like to take a layer mask and apply that same mask to another layer, hold down the Option key (Alt on Win) while dragging the mask to the other layer. (If you don't hold down the Option key, you will simply move the mask, removing it from the original layer. You want to make sure that you copy the mask instead, so that the same mask is applied on both layers.)

Now you'll need to update the frames in the Timeline. Turn off the visibility of all layers except for the bottom layer. Then click on the first frame in the Timeline. The first frame should display the bottom layer, which is the layer that does NOT have a layer mask. Click on the second frame in the Timeline and turn on the visibility of one of the other layers. This frame will contain one masked layer and the bottom layer serving as the background, or "base" layer. Then click on the third frame in the timeline, turn off the visibility of the layer that was used to create the second frame and turn on the visibility of the next masked layer. Continue this process until you have worked your way across the entire timeline, making sure that each frame has the visibility of the bottom layer plus one masked layer. In our video example, we only had three layers, so our three frames contained the following:

Frame 1: Bottom layer only visible

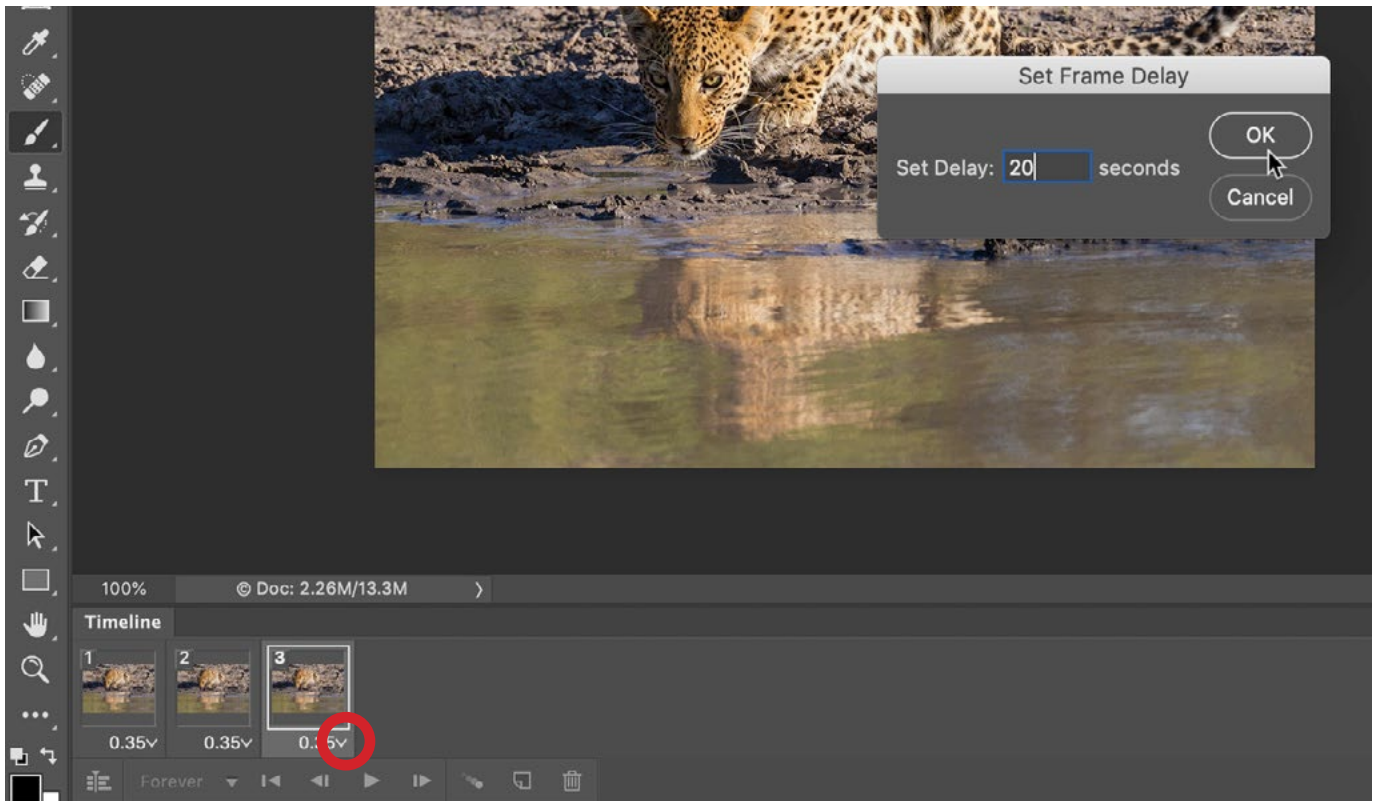
Frame 2: Bottom layer plus middle layer visible

Frame 3: Bottom layer plus top layer visible



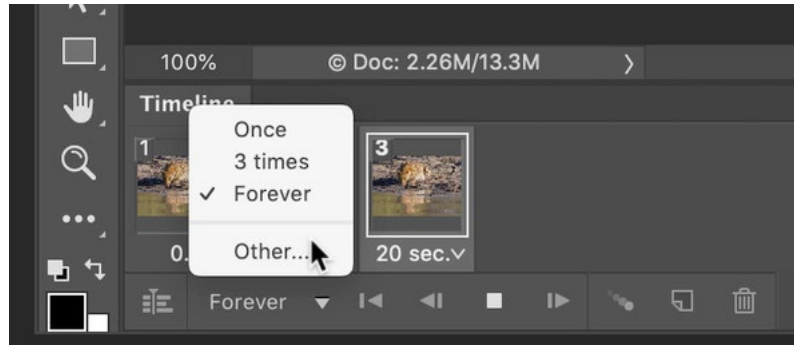
At left, you can see the Timeline, which consists of three frames that make up the animation. We used layer masks to hide the motion in all but one area of the image. Above, you can see the layer visibility for each of the three frames.

Setting the image to only animate periodically When putting an animation online (like on your website), it can be fun to make it look like a regular image but then have it animate only periodically. In order to do this, we would choose the one frame we want it to display for most of the time and then use the little time menu at the bottom of the frame to make the duration much longer. Remember, you can choose the “Other” option from this menu and manually type in a custom duration. In our video example, we chose the frame where the cat’s tongue is not out, we clicked on the little duration menu and set the time to 20 seconds. As a result, the cat will be still for 20 seconds and then it will look like it quickly takes a drink of water.



We clicked on the duration menu at the bottom of the animation frame (circled) and chose “Other” from the menu. This brought up the Set Frame Delay dialog, where we can enter in a custom time duration.

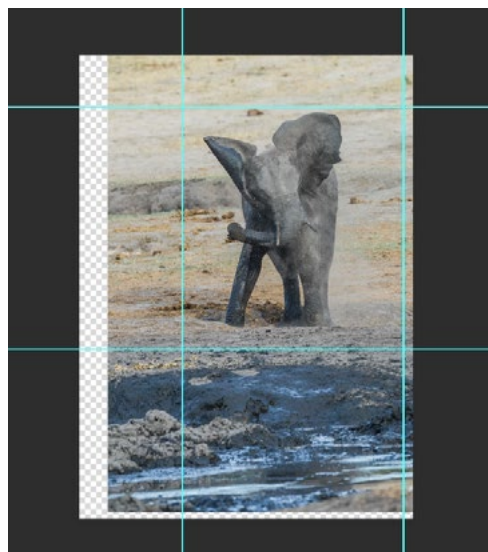
Specify how long the image animation should continue You can specify that the image should animate for a certain period of time and then stop. To do this, click on the little menu on the bottom left side of the Timeline. By default, this menu is set to Forever, which will make it so the animation never stops. When you click on the menu, you'll also have the options of Once (meaning it will only animate one time), 3 times or Other. If you choose Other, you can manually specify how many times the animation should loop before coming to a stop.



The menu in the bottom left corner of the Timeline allows you to determine how many times the animation should loop.

Evaluating your layers When creating animations, you will sometimes want to evaluate each layer, one at a time. Here's a fast way of doing that. Turn off the visibility of all layers except for one. Make sure that visible layer is the active layer. Then, you can use a keyboard shortcut to quickly cycle through the layers. Hold down the Option Key (Alt on Win) and then tap the square bracket keys ([]) to cycle up and down through the layer stack.

Using guides to track motion When viewing your layers one by one, you might want to make a note of how far the motion extends to the edge of the frame. This way, you know where it is safe to crop the image without cutting off part of the animation. In the video example, we have an animation of an elephant swinging his trunk around. We cycled through all of the images, looking for the far-



We placed guides in the document showing where the trunk extends toward the edge of the frame.

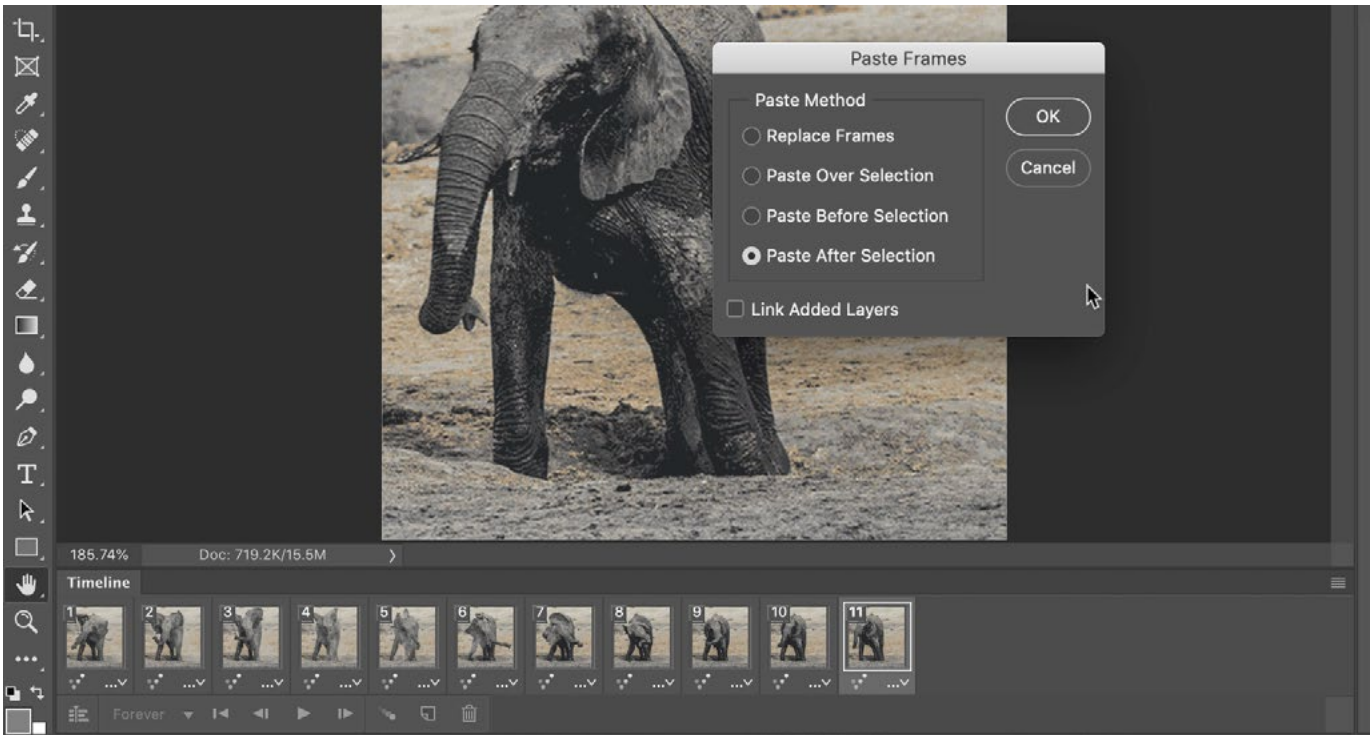
the point where the trunk extends in all directions. When looking through your images like this, it can be a good idea to place guides that show you the farthest points where the motion extends. To place a guide in your document, hover your cursor over one of the rulers surrounding the document window, then click and drag into your document. When you click and drag from the horizontal ruler above the image, you will be placing a horizontal guide. When you click and drag from the vertical ruler on the left side of the image window, you will be placing a vertical guide. Note that if the rulers are not visible in your interface, you can access them by using the keyboard shortcut Command+R (Ctrl+R on Win). To remove the guides, click on the View menu and choose Clear Canvas Guides.

Exporting the animation After creating the animation in Photoshop, you will need to export it in the gif file format because this format supports looping animation. Click on the File menu and choose Export > Save for Web. In the Save for Web dialog, use the file type menu in the top right and choose GIF. Make sure the third menu down is set to the Diffusion option and then use the Colors menu to choose the lowest number that makes the image look acceptable. (You will see a preview of the results in the main part of the dialog box.) Know that the higher the number of colors, the longer the animation will take to load.

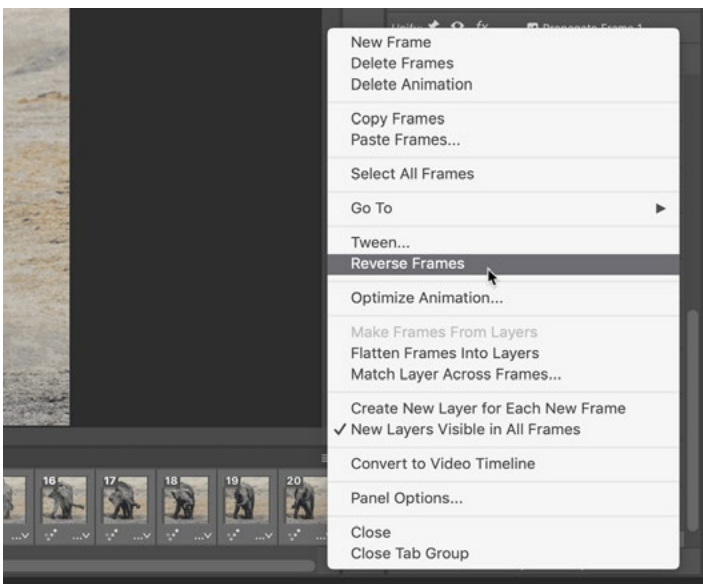
Near the bottom of the Save for Web dialog, there are a few Animation settings and this is where you can specify how many times the animation will loop. You can also view the individual frames of the animation by using the forward and backward buttons at the bottom of the dialog. When you're done specifying the settings, hit the Save button in the bottom right corner of the dialog.

Reversing an animation Sometimes, you may want the animation to be able to repeat AND reverse. (In certain apps, like Instagram, this movement is called "boomerang.") To create this effect, first follow all of the steps listed above for putting your initial animation together. Then, select all but the very first and very last frames in the Timeline. Click on the little menu in the top right corner of the Timeline panel and choose "Copy Frames." Then, click on the little menu again and this

time choose to “Paste Frames.” A dialog box will appear, allowing us to specify a “Paste Method.” Make sure the “Paste After Selection” option is selected and click OK. The copied frames will then appear after the original frames in the Timeline. Before you deselect the new frames, go back to the little side menu and this time choose to “Reverse Frames.” Now, when you hit the Play button, the animation will look as if the motion is going back and forth.



ABOVE: We copied all but the first and last frames. Then we clicked on the little side menu and chose to Paste Frames. Here, we are specifying that the frames be pasted after the selection.



LEFT: With the pasted frames still selected, we are choosing to Reverse Frames.