Bright Sharpen v301

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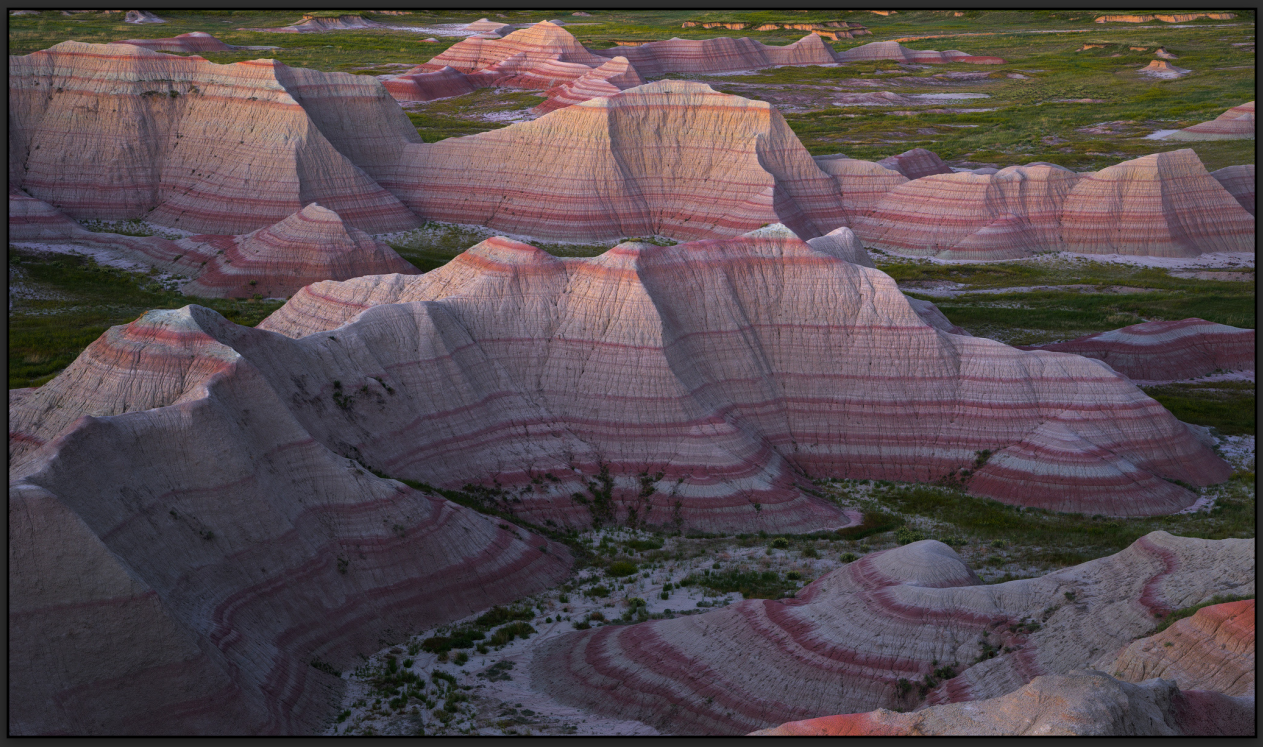


“Painted Prairie” Badlands National Park, South Dakota

Hello, and welcome to Bright Sharpen v301! This update allows you a lot more control over your web sharpening, which I will detail below.

The action is intended to help prepare images for web display. It is designed to bring out a maximum of fine detail, and a minimum of sharpening artifacts IE halos, etc at the default values. Although web sharpening may sound mundane, remember that the internet is the main way in which most people will view your work, therefore I would argue that preparing images for the web is as important as any other step in your workflow.

Below is an example of an Unsharpened image, Natural preset, and Strong preset.

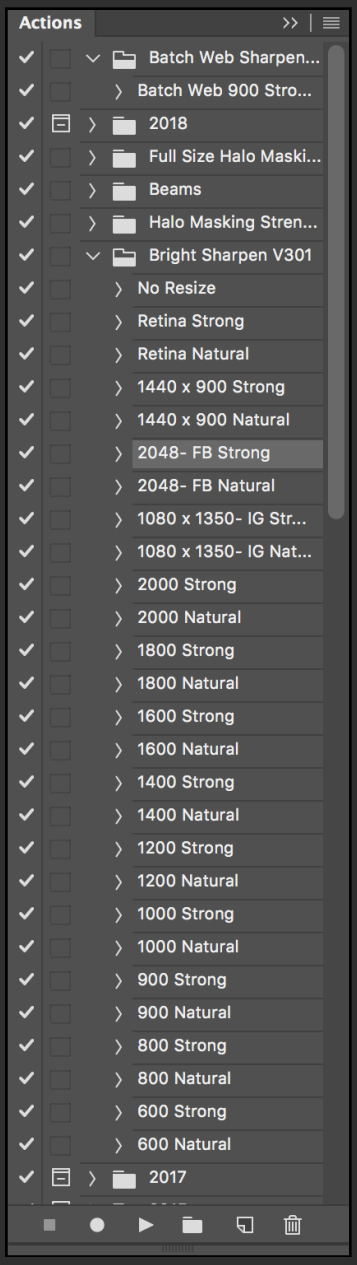
“Field of Streams” Smoky Mountains

First off, let me cover the basics for those who may be first timers. Download the action set and double click it to install in Photoshop. Once you do that, it will appear in a folder in your actions panel. Open the master document you want to resize and sharpen, and choose your size from the options pictured to the right. There are two strength levels available for each size- Strong and Natural. Natural uses a very modest amount of sharpening, Strong is more aggressive. Finally, press the “Play” button at the bottom of the actions panel. It’s the sideways triangle pictured below.

When you press play, the action will first make an identical document to your master document. Next, it will resize and sharpen your image to the dimensions specified. Finally, it will run analysis to create the Edge and Texture sharpening layers. Once this is complete, export your image and save for web. If you are not interested in any further tinkering, that was all you need to know. Feel free to close this PDF and go start using the action!

Anyone who is of the curious type- read on, and I will go into much greater detail about how this action works, as well as some of the more advanced things you can do. From this point on, I will assume the reader is familiar with luminosity masking, layers, layer modes, and the basics of working with actions.

I suggest you now run the action on one of your own images, and zoom in closely to follow along with the remaining PDF.



The main difference between this action and “regular” web sharpening is that it creates two separate layers- Edge Sharpening and Texture Sharpening. If you were to put the Edge Sharpening layer and the Texture Sharpening layer at the same opacity, IE 50% and 50%, the effect is similar to any other kind of web sharpening. Using those layers individually without the other will give quite different results. The opacity of the Edge and Texture layers will determine the strength of the sharpening. If I write about strength, you can assume I mean the opacity of the sharpening layers.

For a visual reference, here is a zoomed comparison of the different modes, all at 70% strength. *(I am using 70% strength so the differences will be obvious. In real life I do not generally sharpen this much. Setting the Texture and Edge layers to 30-40% opacity will create an effect similar to most other web sharpening actions at default values.)* To see the different effects of the Edge and Texture layers on your own image, bring the opacity of the Edge and Texture sharpening layers to 100%, and hide them one at a time. Below is a suggested workflow if you want to experiment with your own opacity values.

Unsharpened

Texture sharpening added to desired level. Brings out fine detail. Resilient to most artifacts.

Final sharpening

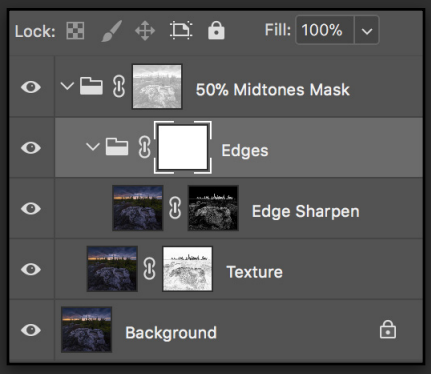
Edge sharpening added to desired level. Focuses on hard edges. Easily causes halos and an oversharpened look if used excessively.

The recipe for the default settings are as follows-

Natural- Edge Sharpening 0%, Texture Sharpening 40%

Strong- Edge Sharpening 10%, Texture Sharpening 70%

Here is a breakdown of the layers you get once running the action.



At the bottom, there is a background layer that is completely unsharpened. Above that is the Texture layer, with its corresponding mask. Above that is the Edges layer, which is in a group. The group comes with a white mask in case you want to remove the edge sharpening from specific areas with a black brush. Both the Texture and Edge layers are within a final group, called 50% Midtones Mask. This group has a mask on it that will reduce the sharpening effect by up to 50% in the brightest and darkest areas of your image. This is because the deep shadows are prone to noise and the brightest areas rarely need as much sharpening anyways. If you disagree, and want to disable or delete the 50% Midtones mask, it won't break anything. The overall group is selected by default after running the action, to provide a quick way to reduce the effect of overall sharpening by lowering the opacity.

If you find that you prefer a certain combination of Edge and Texture sharpening that is different than the defaults, making a new preset with your own defaults is not difficult, especially if you have an understanding of how actions work already. To do so, first run the action at the size you prefer, and then before doing *anything* else press the record (circle) button on the bottom of the actions panel pictured below.

BEWARE! Once you start recording, Photoshop will write *everything* you do into the action, until you hit the square STOP button pictured above. This would include things that could be destructive to your master files! Make sure you ONLY make the changes to the opacity of the Edge Sharpness and Texture Sharpness layers in the sharpened document, and then press the square STOP button right away. Once you do this, Photoshop will make the same adjustments to the opacity every time you run the action and you will have your own custom preset. Be mindful of this any time you are recording an action, or you can end up with photoshop doing some very strange things..

Using Edge Sharpening in Lighten Mode

“Lost” Olympic National Park, Washington State

Here is another highly zoomed in example, from a forest scene in Washington State. Yes, we're pixel peeping, but the devil is in the details as they say, and web sharpening is all about the details! Below is the "Strong" Preset. I went ahead and boosted the Texture Sharpening layer from 70% to 80%, to make sure the examples are glaringly obvious.

As you can see, there was a lot of nice light this morning glinting off of everything and making the moss really glow. The texture sharpening did a good job with bringing out the more subtle detail of the image, but it is quite restrained when it comes to specular highlights such as the sunlit mossy rocks, or the glistening tree branches top right. Suppose you wanted to boost details like those, without overcooking the sharpening? First off, go ahead and add an equal amount of Edge Sharpening to your image. You can see the results below for this image.

Well, the Edge Sharpening layer certainly brought out the specular highlights! It also looks to have overdone it, particularly around the mossy rock edge and in the sunlit branches top right. Have no fear- I have a trick for you. The over sharpening issues in a scene like this are caused by the dark haloing around the branch and mossy rock. We can overcome them by simply changing the layer mode of the Edge Sharpening layer to “Lighten”. Because the Edge and Texture sharpening are on separate layers, they do not need to share the same layer mode.

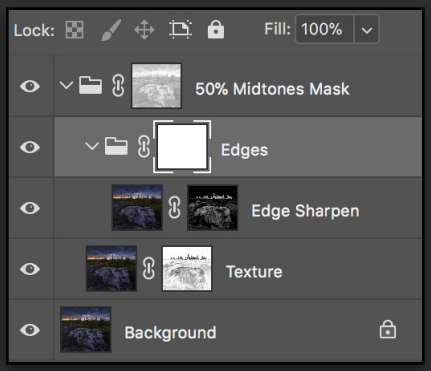
Using Edge Sharpening with a Mask

“Stone Poem” Dolly Sods Wilderness, WV

This is the first image we have examined that has a typical horizon, and I picked it specifically because it would be a doozy to mask all those branches out using normal methods. Below is the haloing caused by standard sharpening on the branches.

Nasty! *(Again I overdid it for the example, with 70% on both sharpening layers.)* The easiest way to deal with this type of thing is to simply use the Texture sharpening layer and no Edge sharpening, as below.

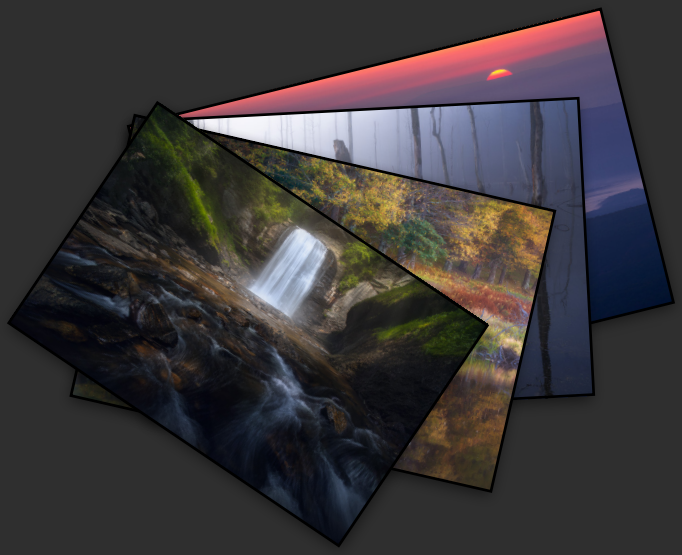
But suppose you had an image where you really liked the Edge sharpening layer on all but the horizon? Maybe some specular highlights like the example earlier, where you changed the mode to Lighten on the Edge layer? Lighten mode won't help you with a horizon such as this, because the halos in this example are bright. Luckily, there is already a white mask on the Edge Sharpen layer group, ready to assist. You can see it selected to the right. Just use a black brush and paint where you want the edge sharpening to go away. Because the entire image is still receiving Texture Sharpening, you will find that transitions are extremely forgiving when painting, all the detailed work has already been done by the masks. Even a non artistic oaf such as myself can make quick work of any horizon issues.



On a similar note, the mask technique can also be quite useful when it comes to star photography. On a night image, try the preset "Strong" and then change the mode of the Edge layer to "Lighten". Then turn the opacity up to 70%. Next invert the mask shown above into a black mask, and then paint the Edge layer over stars with white. You will find you can brighten your stars quite a bit without halos, should you choose to do so.

"Edge of Perception" Dolly Sods Wilderness, WV

Using the action on a batch



Suppose you want to use the sharpening on an entire collection of photos. Doing this manually is not awesome, but it is easy to set the action up to use automation.

First, make sure you *already* have an image open before going any further. It doesn't matter which one. *(If you open any document **while** recording your action, it will record the opening of that particular document and repeat it every time the action is run!)*

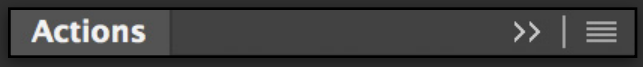
Make a new empty action and call it something descriptive, IE if it is for the FB 2048 action I would name it FB 2048 Batch. You can do this by pressing the button on the bottom of the actions panel that looks like a page with the edge folded over, pictured below just next to the trash can icon. Once you name your new action, the circular Record button should be highlighted, and you are recording an action. Select the FB 2048 action in my set and press play.

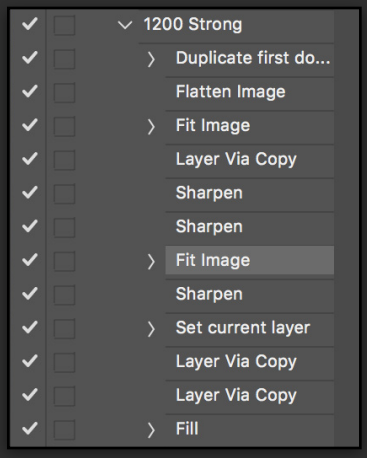
Once it is finished running, export the image for web using File/Export/Save for Web (Legacy), and make a specific folder for the destination, like /desktop/FB 2048 or similar. *(Don't rename your jpg, use the default name the JPG export dialog suggests. If you name it something specific, the batch will do that too- and all of your files will have the same name and overwrite each other!)* Once the jpeg is saved, then Close All. *(on mac the shortcut is Shift-Option-Command-W)* When it asks say NO to all saving, and check the "apply to all" box. Then, press stop on the action recording panel.

Now you are ready to batch process. Go to File/Automate/Batch. In the dialog make sure the action you just created is selected. For Source, choose the folder containing the images you want to sharpen. For destination, select "none", and run it. *(You don't need a destination as you set this up when you exported the image to the folder you made earlier)*

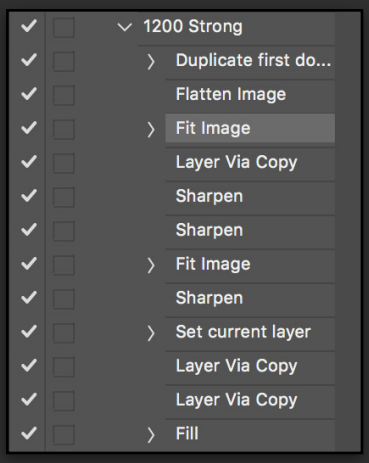
Making custom sizes

To create your own custom sizes, open the actions panel. Select one of the presets and click the drop down menu on the top right corner of the actions panel. It's the four horizontal lines on the right, pictured below.





Once you do that, hit "Duplicate" to make a copy of the action you selected. Open the action and you will see all the steps inside. Notice that steps #3 and #7 are the "Fit Image" command. These are the ones you will be changing. To change the values, first double click the #7 "Fit Image" command. It will pull up the "Fit Image" dialog. Put your desired values in there. Just for example I will use 1100w x 1100v. Make sure "Do not enlarge" is checked. Hit OK when done and it will rewrite the values for that part of the action. *Note- it will also resize your open document when you do this. Just use the history tab to go back a step if you didn't want that.* On the left is the first "Fit Image" command you should edit, #7.



Once this is done, double click the #3 "Fit Image" command, highlighted to the right. Enter your desired values x 1.6667. So, for 1100x1100, enter 1833x1833. You don't need decimals. Again, make sure "Do Not Enlarge" remains checked. Then hit OK. Once this is complete, rename your action to the dimensions you have added and you're done! You don't have to mess with the Record and Stop buttons when you edit steps this way, the changes only effect the step that you double clicked on.

Does this use “Find Edges”?

I am sometimes asked if this action uses the “Find Edges” technique. The short answer is no. It does not use the find edges filter. Although the idea is the same, in all of my testing it has proven far superior to Find Edges, due to the simple fact that Find Edges is an “artistic” filter and thus makes seemingly random choices as to what to include when making the mask. Here is an example.

Above is my texture masking at 100%, below is the Find Edges technique on the same image at 100%. Note the black “sprinkles” all over the second image- this is hard sharpening that Find Edges skipped over. It would be easy enough for you to do your own test in the same way, if you were curious.

Final notes

I hope this action helps you as much as it has helped me! Seeing the amazing images everyone creates is one of the things I look forward to each day. If you have any suggestions for improvements, please feel free to send away!

“Timeless” Sunwapta Falls, Canadian Rockies

FAQ

- **What about sharpening for print?**
- *I may one day tweak it for print, if there is interest. As is, the masking is not optimized for full scale images and I suspect the results would not be great. On a full scale image, the noise plays a much larger part in the analysis, and the details a smaller part. Because of that, the masking is overly aggressive and ends up hardly sharpening anything at all. Let me know if you would like this feature and I'll see what I can cook up.*

- **What about color conversion IE 8-bit, sRBG, etc?**
- *I prefer to leave this up to the operator, as we all have different ways we work. I do my sRGB and 8-bit conversion in the Save for Web (Legacy) dialog, and have not noticed any issues that would cause me to stop doing things this way.*

- **What color settings do you use when editing?**
- *I shoot with 14-bit, lossless compressed RAW format and edit in 16 bit Adobe RGB. I export using the Save for Web dialog, keeping metadata, converting to sRGB, embedding the color profile, and about 80% quality.*

- **Will this action work with 16 bit images?**
- *Yes, it was designed entirely with a 16-bit workflow. I would imagine it would work the same with an 8 bit workflow, but have not tested it. If you find any issues please notify me.*

- **Will this action work with LAB mode, grayscale, etc?**
- *Probably not, it is untested. I recommend any flavor of RGB image- ProPhoto, Adobe, or sRGB.*

- **Will this action work with Lightroom?**
- *No, Lightroom does not have support for layers or the filters used.*

- **Do you know of any bugs?**
- *I suspect that if you have changed the default clipping points on your Auto Contrast, that could potentially cause issues with the way the texture mask is computed, but I have not confirmed that as of yet. Other than that, no.*

- ***Why does it create a second document instead of resizing the first?***
- *This is to preserve the history of your master document, and to prevent a situation where you could accidentally rewrite your master document with a low resolution version if you pressed save at the wrong time.*

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