Reducing image sizes to fit for S4C Competitions

S4C has changed its image size requirements from requiring the image to fit within a 1024 x 1024 pixes square to where it is required to fit within a rectangle of not more than 1400 pixels in width and 1280 pixels in height.

Whereas fitting images to the old requirement was relatively straightforward when the width and height limits were the same, the new requirement presents some minor issues that need to be addressed. In particular, an additional step may be required for images that are close to "square" in format, that is, when the horizontal and vertical dimensions are close.

In this article, several approaches are outlined. The focus will be on Lightroom, Photoshop, and Photoshop Elements. Users of other image processing software can, it is hoped, adapt some of the concepts presented here to their own situation - and Google is a wonderful reference source!

For the more experienced user, there is an appendix on creating borders; and another appendix on the use of Actions.

Topics:

1. **Downsizing in Lightroom**
2. **Downsizing in Photoshop - the easiest way**
3. **Downsizing in Photoshop or Photoshop Elements - the traditional way**
4. **Appendix 1: Adding Borders**
5. **Appendix 2: Creating and Using Actions - for the more daring**

Note: In the following, the notation Image>Image Size (for example) means first go to Image in the application menu at the top of your screen; and then from the pulldown go to Image Size.

This documents assumes you wish to downsize from a larger image that you have already modified to taste (and in accordance with S4C requirements!) using image processing software. I would always recommend storing the large version of the image and only downsizing when necessary at time of entry to meet different requirements of various competitions. Downsizing - and perhaps some sharpening - are probably the last steps to take before entry.

Stuart Lynn, August, 2018. S4C Competition Chair

1. Downsizing in Lightroom

We start with **Lightroom**. Lightroom makes it easy to resize images. You do it when you are exporting your images from Lightroom. Just go to **File>Export** to bring up the export dialog box as above.

After selecting the **Export Location (1)** and any other settings you wish to change, go to **Image Sizing (2)**, and enter 1400 in the W box and 1280 in the H box **(3)**, making sure that Pixels has been selected. Also check the **Don't Enlarge (4)** checkbox in case you are entering an undersized image.

Finally click the **Export (5)** button and you are all done!

3 Downsizing in Photoshop - the easiest way

In Photoshop there are usually several ways to achieve the same result. The same is true for resizing images. The easiest way to downsize an image to fit S4C's requirements is to use a tool that most folks do not seem to use, partly because Photoshop hides it away in a strange place: **Fit Image**. Unfortunately, this appears not to be available in Photoshop Elements :-(

Just go to **File>Automate>Fit Image**, that is, select File from the Photoshop menu, then select Automate from the dropdown, then Fit Image from the next dropdown.
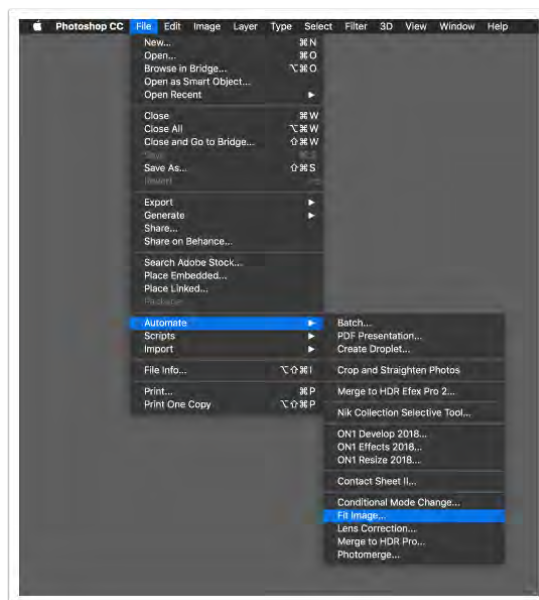
This results in the following dialog box:
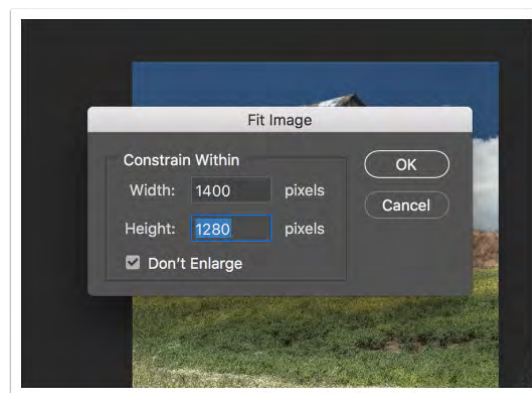
Just enter the Width and Height parameters as shown and click OK. You are done in a single step! Similar to when you export from Lightroom.

Do make sure that the **Don't Enlarge** box is checked because you do not want Photoshop to enlarge images that already fit the required dimensions - this could result in pixellation.

4. Downsizing in Photoshop or Photoshop Elements - the traditional way

The traditional way of downsizing images in **Photoshop**, is to go to **Image>Image Size.** In **Photoshop Elements** go to **Image>Image Resize>Image Size.**

In Photoshop this results in the dialog box shown below. The dialog box in Photoshop Elements is essentially the same - the minor differences will be described below. Actually, this is not just the "traditional way" in Photoshop Elements: it is the *only* way!

Apart from providing fewer options (that I never use) for downsizing, I find that it is quicker and easier in Photoshop to use Fit Image over this Traditional Method. There are fewer steps involved.

The workflow in Photoshop for this traditional approach is as follows:
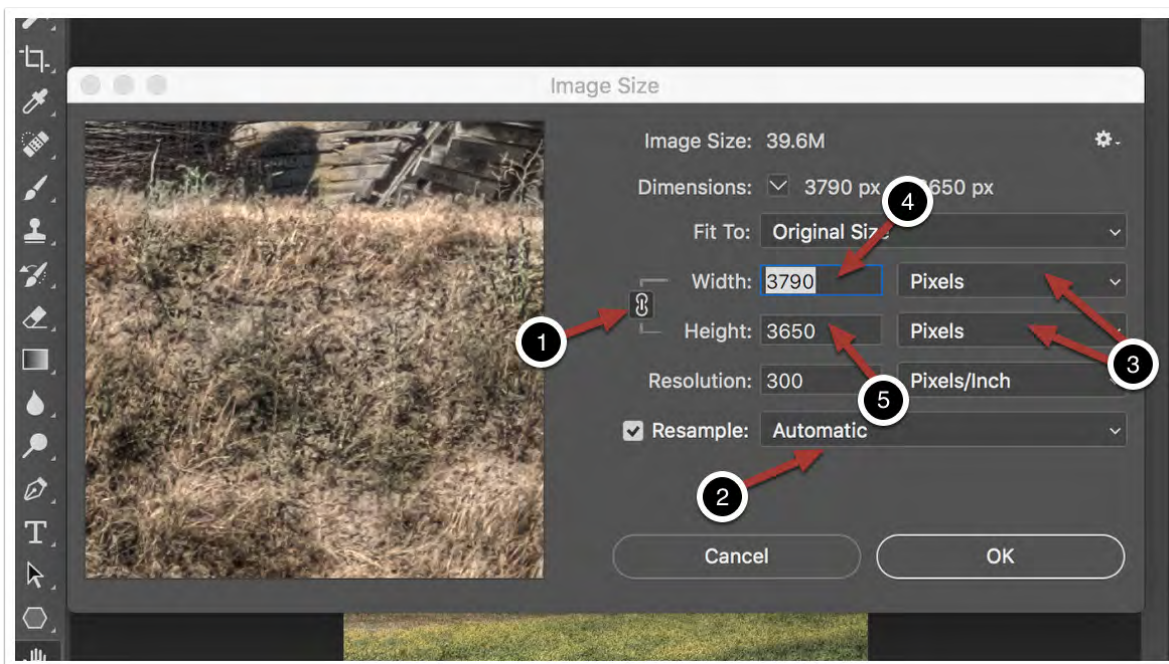
Make sure that the **Constrain Proportions** link **(1)** is clicked as shown here. This ensures that any changes to the image size result in an image of the same proportions. I also suggest the the **Resample** pulldown **(2)** be set to Automatic; and of course that the **Units (3)** be set to "pixels". The **Resolution**

setting does not matter for images that are just intended for projection - the setting is only important for printing images.

The dialog box is essentially the same in **Photoshop Elements** except that Constrain Proportions is a separate checkbox and Resample Image should be left blank to induce automatic resampling.

In previous years, when the constraint was that the largest dimension not exceed 1024 pixels, we simply reset the largest dimension - in this case the Width - to 1024 pixels and clicked OK. No problem. **But because of the different width and height dimensions in the new requirements, an extra step may be necessary particularly for images that are close to square. The procedure is:**

1. **If the Width parameter (4) is *greater* than 1400, change it to 1400.** Otherwise go to Step 2.
2. **If the Height Parameter (5) is still greater than 1280, change it to 1280.** Otherwise leave it alone.
3. **Click OK.**

In this example, the final dimensions of the image image are 1329 (Width) x 1280 (Height). It meets the requirements. Had we omitted Step 2, the Height dimension would have been 1348, larger than allowed!
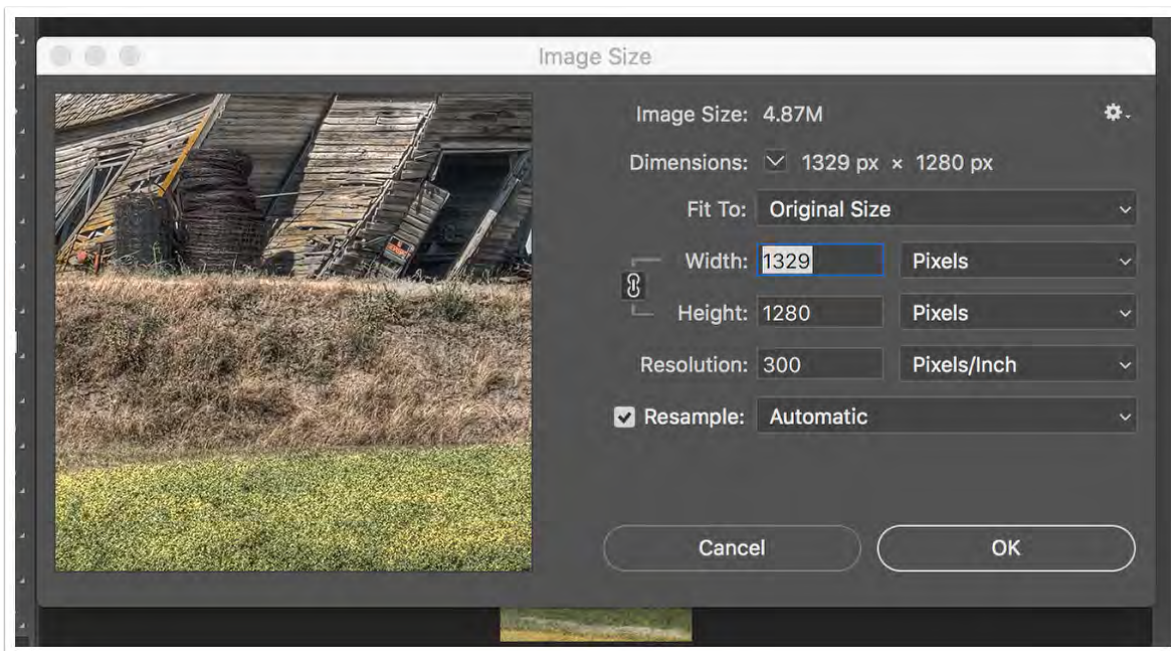
Appendix 1: Adding Borders

But what if you want to add a border to your image? Then matters become a little more complex.

There are ways to add borders to images in Lighroom *before* you export your image *(beyond the scope of this outline).* However, **the right time to add a border is** *after* **you have downsized the image** - particularly if you are entering the image into one of the S4C reality-based divisions (Nature, Photo Travel, Photojournalism) where there are very precise requirements for border sizes. Otherwise you may get involved in some tricky mathematical calculations!

So how do you add a border *after* you have exported the image from Lightroom? The answer is to do it in **Photoshop**, **Photoshop Elements,** or whatever image processing software you are using that supports image resizing.

Which leads us to adding borders in **Photoshop**.

If you know that you are planning to add a border of a certain width, the best way is to allow for that when downsizing, whether when exporting from Lightroom or using either method in Photoshop. Of course, the extra space can also be created with a second downsize in Photoshop.

So if I know that I want to add a 5-pixel border to my image and yet have it fit within the required dimensions, in Fit Image I use 1390 for the Width and 1270 for the Height (likewise, I would reduce the corresponding parameters when using the Traditional Method in Photoshop or Photoshop Elements). I then add a 5-pixel border, first using **Image>Canvas Size** to restore the image to its appropriate size by adding 10 pixels back to the image width and height dimensions, and choosing the color I want to use for the border. *(Note: it may be necessary to first change the units in Canvas Size to pixels).*

I do *not* **use Edit>Stroke** (as some entrants do**)** - at least not until first having performed the steps in the previous paragraph!!! The reason is that adding a stroke to a downsized image places the stroke *inside* the edge of the image, intruding on the precious real estate of my carefully created image! If you have already enlarged your Canvas Size as in the previous paragraph then you can add your stroke outside the image.

Appendix 2 Using and Creating Actions - for the more daring!
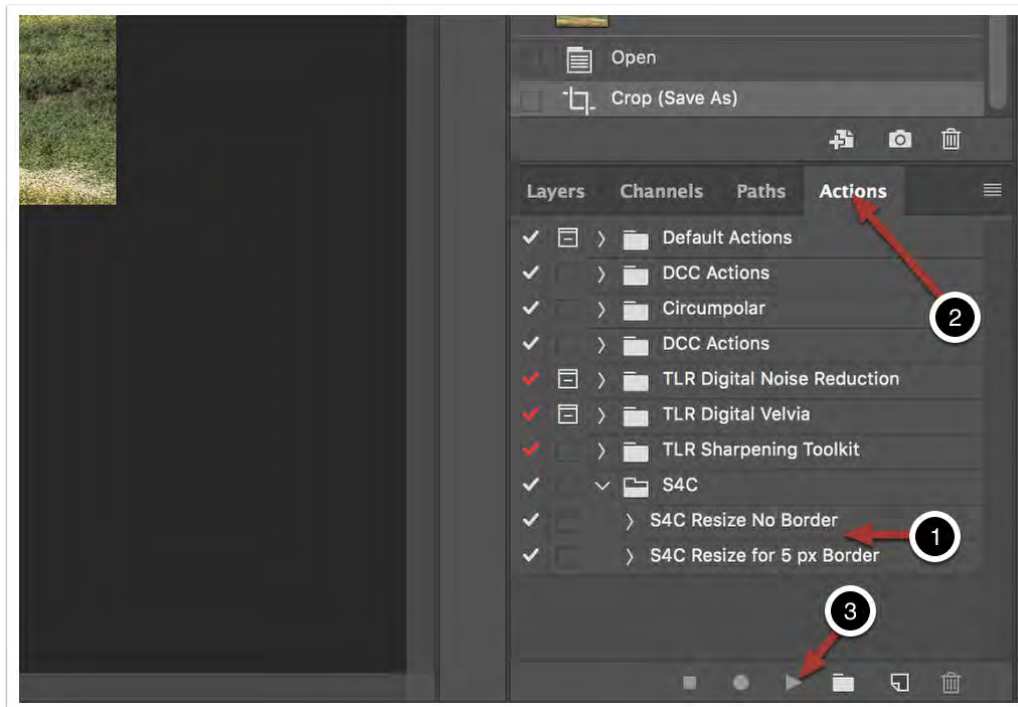
Photoshop has a powerful tool, **Actions,** that enable users to combine a series of steps into a single step. This is useful if you intend to perform the same series of steps repetitively on different images.

I have two Actions **(1)** that I created in Photoshop, one that automatically downsizes the image to fit within 1400 x 1280 pixels; and the second so that it fits within 1390 x 1270 pixels in case I want to add a border. I always keep my Actions window **(2)** open (use **Window>Actions**) so that both Actions are always at hand.

An important advantage of using the Fit Image approach to downsizing images in Photoshop is that it can be more easily made into an Action (see below). The Traditional Method can also be made into an Action but it requires pausing to allow the user to enter the Width and Height parameters in the two step process described in resizing using the Traditional Method.

Another advantage of using a Fit Image Action is that it can be used for batch processing a series of images *(beyond the scope of this article!)*.

If I have an image open that I wish to downsize, I simply select the action I want to run in my Actions window, and click the Run button **(3)**. Presto!

So how does one create an Action in Photoshop for Fit Image?

if you have already created an Action, you know it is quite a simple process. First open an oversized image. Then, if you have not already done so, open your **Actions Window (1)** using **Window>Actions**. Let's look at a relatively simple action.
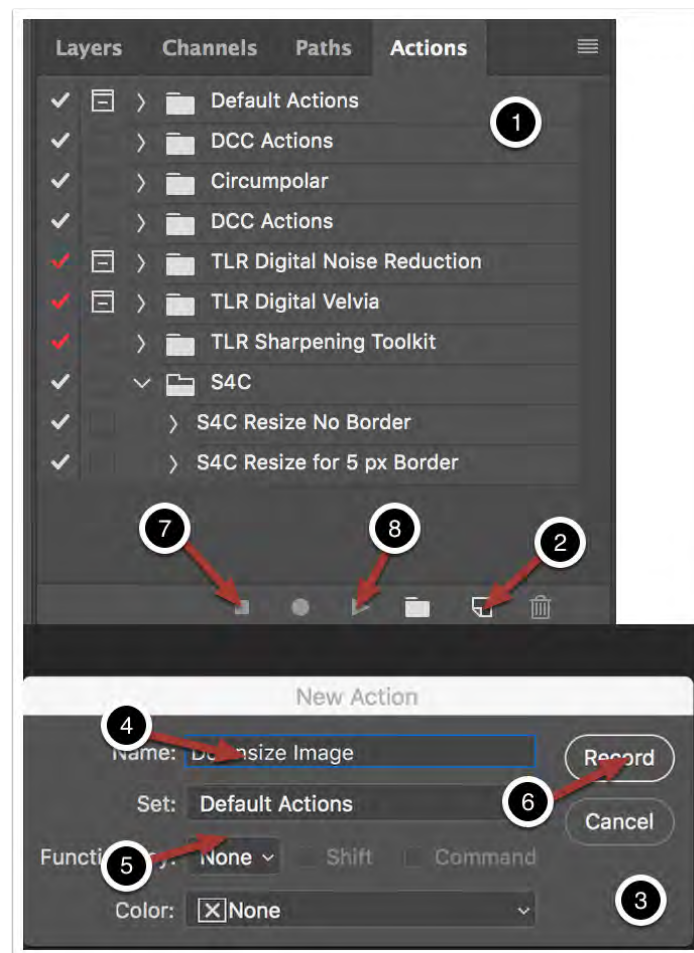
Then proceed through the following steps:

1. **Click the Create New Action button (2).** This will open a **New Action dialog box (3).**
2. **Enter the name of your new action (4).** Actions are conveniently grouped into "sets" or folders; you can default to the pre-existing standard set of Default Actions (shown) or you can create a new set, such as S4C, by entering a new name in the **Set** field **(5).**
3. **Click the Record button (6) to start recording your action.**
4. **Go through the steps you went through to downsize your image using Fit Image (see preceding section). Caution: do not do anything other than the bare minimum necessary.** You may want to do a dry run before actually. recording the Action.
5. **Click the Stop Recording button (7).**

That's all there is to it.

To run your Action on an already open image just highlight your Action in the Actions Window and click the Run button **(8)**,