

How to Prepare Images for EIC

by Willem Bier (published in *The Lens and Eye*, September 2010)

I often get questions about the procedures for preparing images for the Electronic Image Competition (EIC) from members who are new to EIC or who have bought new software. The process is different depending on the photo editing software you use.

Here, I will survey five of the most popular photo-editing programs. I will explain five tasks: (1) scaling the image to the correct size for competitions (maximum 1400 pixels horizontally and 1050 vertically); (2) changing the color profile to sRGB; (3) converting an image to JPEG; (4) saving the file as a new file so as to leave the original untouched; and (5) keeping the file size to 1.5 MB or less. This last task is not particularly significant because in almost all cases, when the image is 1400x1050 pixels, the file size will be less than 1.5 MB.

Note that under a new rule this year, the size of an image file that is submitted for EIC can be up to 1.5 MB (see the document "[Electronic Image Submission Guidelines](#)" on the NBCC Web site, which also explains the file naming conventions for EIC).

You may have to access different menus in your software to perform all these five tasks, though in some photo-editing programs several of these tasks are grouped together. While it may be possible to achieve the desired results by using different methods, I will limit this article to one method for each photo-editing program.

Photoshop Elements 8

To set the image size

From the top menu select Image/Resize/Image Size. A dialogue box will appear called Image Size. At the bottom of the box, check both Constrain Proportions and Resample Image. When reducing the image size, select Bicubic Sharper (best for reduction). Set Resolution to 72 pixels/inch. Set Width to 1400 pixels; the height will be determined automatically by the program. If the resulting Height exceeds 1050 pixels, set Height to 1050 pixels and let the program determine the Width. Click OK.

To set the color profile to sRGB

From the top menu select Image/Convert Color Profile/Convert to sRGB Profile (if available; it may be grayed out, meaning the color profile is already sRGB).

To save the new file, convert the image to JPEG, and select the file size

From the top menu select File/Save As. A dialogue box will appear called Save As. Enter a new name for the file in accordance with the EIC naming conventions. For Format, select JPEG. Click Save. Another dialogue box will appear called JPEG Options. For Quality, enter a number from 12 to 1; begin with 12, which will give the best quality. Note that this dialogue box indicates on the right the (approximate) file size (provided Preview is checked). If the file size exceeds 1.5 MB, try a lower number for Quality. Click OK.

Photoshop CS4 and CS5

To set the image size

From the top menu select Image/Image Size. A dialogue box will appear called Image Size. At the bottom of the box check both Constrain Proportions and Resample Image. When reducing the image size, select Bicubic Sharper (best for reduction). Set Resolution to 72 pixels/inch. Set Width to 1400 pixels; the height will be determined automatically by the program. If the resulting height exceeds 1050 pixels, set Height to 1050 pixels and let the program determine the width. Click OK.

To set the color profile to sRGB

From the top menu select Edit/Convert to Profile. A dialogue box will appear called Convert to Profile. In the Destination Space, select sRGB IEC61966-2.1. Click OK.

To save the new file, convert the image to JPEG, and select the file size

From the top menu select File/Save As. A dialogue box will appear called Save As. Enter a new name for the file in accordance with the EIC naming conventions. For Format, select JPEG. (If JPEG is not available as an option, check that you are working with an 8 bit image file; to convert to an 8 bit image, from the top menu,

select Image/Mode/8 Bits/Channel). Click Save. Another dialogue box will appear called JPEG Options. For Quality, enter a number from 12 to 1; begin with 12, which will give the best quality. Note that this dialogue box indicates on the right the (approximate) file size (provided Preview is checked). If the file size exceeds 1.5 MB, try a lower number for Quality. Click OK.

(Note that an alternative method for Photoshop is described in the document ["How to Prepare Images for Electronic Presentation"](#) on the NBCC website.)

Lightroom 2 and 3

In Lightroom you have to export the image. The first four tasks are completed in a single dialogue box.

To set the image size, convert the image to JPEG, set the color profile to sRGB, and save the new file

Select File/Export: a dialogue box will open called Export. There will be seven sections to complete; I will deal here only with the sections that concern us. In the section **Export Location**, decide where you want to save the new image; also, make sure to check Add to This Catalog. In the section **File Naming**, select Template: Custom Name, and enter a file name in accordance with EIC naming conventions. In the section **File Settings**, select Format: JPEG, Color space: sRGB, and, using the slider, set the quality to a specific value. Selecting a quality of 100% will in most cases result in a file that does not exceed 1.5 MB. (In LR3 there is an option to limit the file size to 1500 K (=1.5 MB) and the program will decide the quality accordingly). In the section **Image Sizing**, select Resize to Fit: Width and Height, and enter the maximum dimensions of 1400 and 1050. The resulting dimensions will always be correct for the competition, i.e., the width will not exceed 1400 and the height will not exceed 1050. In the same section, set the resolution to 72 pixels per inch.

At this point, after having done all this work, you can actually save these settings as a User Preset, and you can use this preset when you submit images for the next competition.

To check the file size

To check the file size, refer to the metadata (the new image will be in the catalog, provided you checked Add to This Catalog in the Export Location section). Redo the Export process if the file size exceeds 1.5 MB and select a quality lower than 100%.

iPhoto '08

In iPhoto, you have to export the image, which takes care of tasks 1, 3, and 4.

To set the image size, convert the image to JPEG, and save the new file

From the top menu select File/Export. A dialogue box will appear called Export Photos; in the dialogue box you complete three of the five tasks simultaneously. From the options at the top of the box, select File Export. For Kind, select JPEG. For JPEG Quality, try High for a horizontal format and Maximum for a vertical format. I found that these settings result in an image that is smaller than 1.5 MB for most images; unfortunately you can only find this out at the end of the process, and you may have to repeat the Export process if the file is too large. For Size, select Custom. For Max, select Width and enter 1400 if it is a horizontal format. If your image format is vertical, select Height and enter 1050. For File Name, use Title. Click Export. A new dialogue box will appear, where in "Save as" you enter a file name in accordance with EIC naming conventions. Select where you want the new file to be saved. Click OK.

To check the file size

To check the file size, right click on the image and select File Info. If the file is larger than 1.5 MB, redo the above process and try the next lower quality for JPEG Quality.

To set the color profile to sRGB

The default for the color profile in iPhoto is CameraRGB, which is the Apple version of sRGB. If you do not want the default, iPhoto will use the color profile embedded in the original image. There are no other options. To change from the default, select iPhoto/ Preferences/Advanced and check Embed ColorSync profile.

Aperture

In Aperture, you export an image using a preset that essentially automates the process, completing all steps at the same time. Because Aperture does not have a preset that meets the requirements of the EIC, you will first have to create your own EIC preset. Once you have created it, you can use it for all future EIC submissions.

To create an EIC preset

From the top menu, select Aperture/Presets/Image Export. A dialogue box will appear called Image Export. To make a preset for EIC, click on the + button in the bottom left corner. Call this preset JPEG-Fit within 1400 x 1050 (or EIC). Now, fill in the various options: for Image Format, select JPEG; for Image Quality, select 12; for Size To, select Fit Within (Pixels); for Width, select 1400; for Height, select 1050; for DPI, select 72; for Color Profile, select sRGB IEC61966-2.1. Click OK and you have created the EIC preset.

To set the image size, convert the image to JPEG, set the color profile to sRGB, and save the new file

From the top menu, select File/Export/Version. A dialogue box will appear. Select where you want the new file to be. For Export Preset, select JPEG-Fit within 1400 x 1050 (this is the preset you created). For Name Format, select Custom Name with Index. For Custom Name, type an appropriate name in accordance with EIC naming conventions and click on Export Versions.

To check the file size

Verify that the file size is 1.5 MB or less (right click on the image and select File Info). If the file size is too large, change the quality setting in your preset and export the image again.