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## **OWPG advice note: RESIZING PHOTOS**

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For those of us who are photographers, assessment of image size, and the tradeoff between file size and loveliness, is pretty much instinctive. But writers, and even writer/photographers, can be forgiven for finding it obscure. After all, Adobe Photoshop goes out of its way to be confusing on the issue. And even Nikon's pretty good camera software hides 'resize' within a menu called 'convert'.

Whether we're entitled to be confused about this issue or not, the difficulties in uploading images to the owpg profile pages suggests that many of us are.

### **What is image size?**

Take a nice (well I think it's nice) evening picture of Ben Vorlich straight out of my 10PMX digital camera. The image size is *32cm x 22cm at resolution 300 pixels/inch*.

Note the confusion of units straight away (inches mixed with centimetres). Also, pixels/inch become dpi (dots per inch) whenever someone starts thinking printout rather than screen view. In practice, pixels/inch and dots per inch are exactly the same thing. (Like calling it fur when it's on a dog and hair when it's on a person.)

My camera saved my pic of Ben Vorlich as an uncompressed jpeg file. The file size is 4.9 Megabytes, which is too much to send by email, even this one photo on its own. And if I put it on a website, it arrives not 32cm wide but about 140cm wide. Not helpful. Anyway, the owpg profile page needs it to be 500px wide.

### **Two ways of resizing an image and only one of them actually changes the size**

There are two ways of resizing an image but one of them doesn't make any difference. I could halve the width and height of my picture by moving the individual pixel dots closer together. I could get

*16cm x 11 cm at resolution 600 pixels/inch*

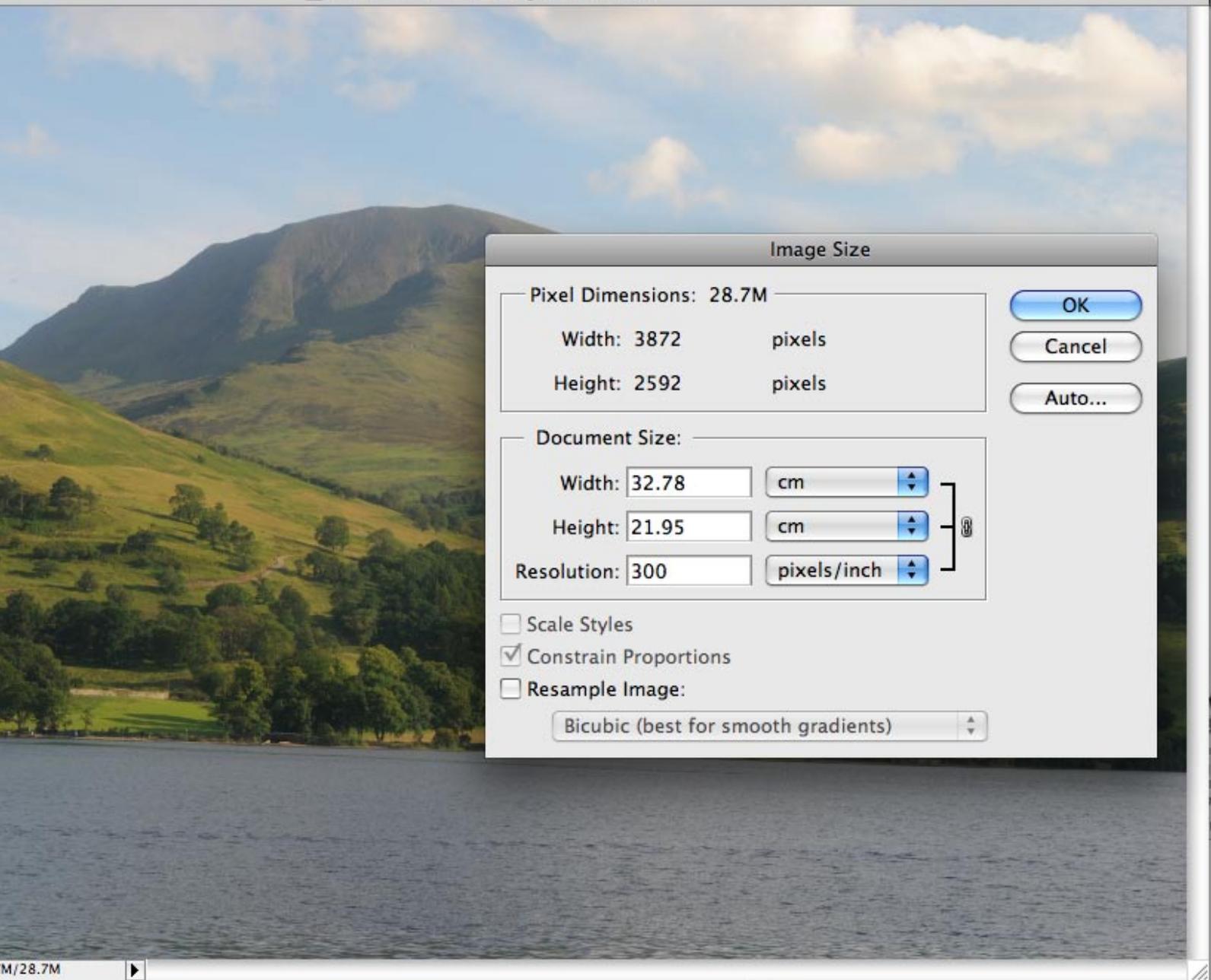
or an amazingly sharp postage stamp image

*3.2cm x 2.2cm at 3000 pixels/inch*

or I could expand it to the size it would naturally appear on a computer screen

*136cm x 91 cm at 72 pixels/inch*

None of this makes any difference to the file size. That stays at 4.9 Megabytes throughout.



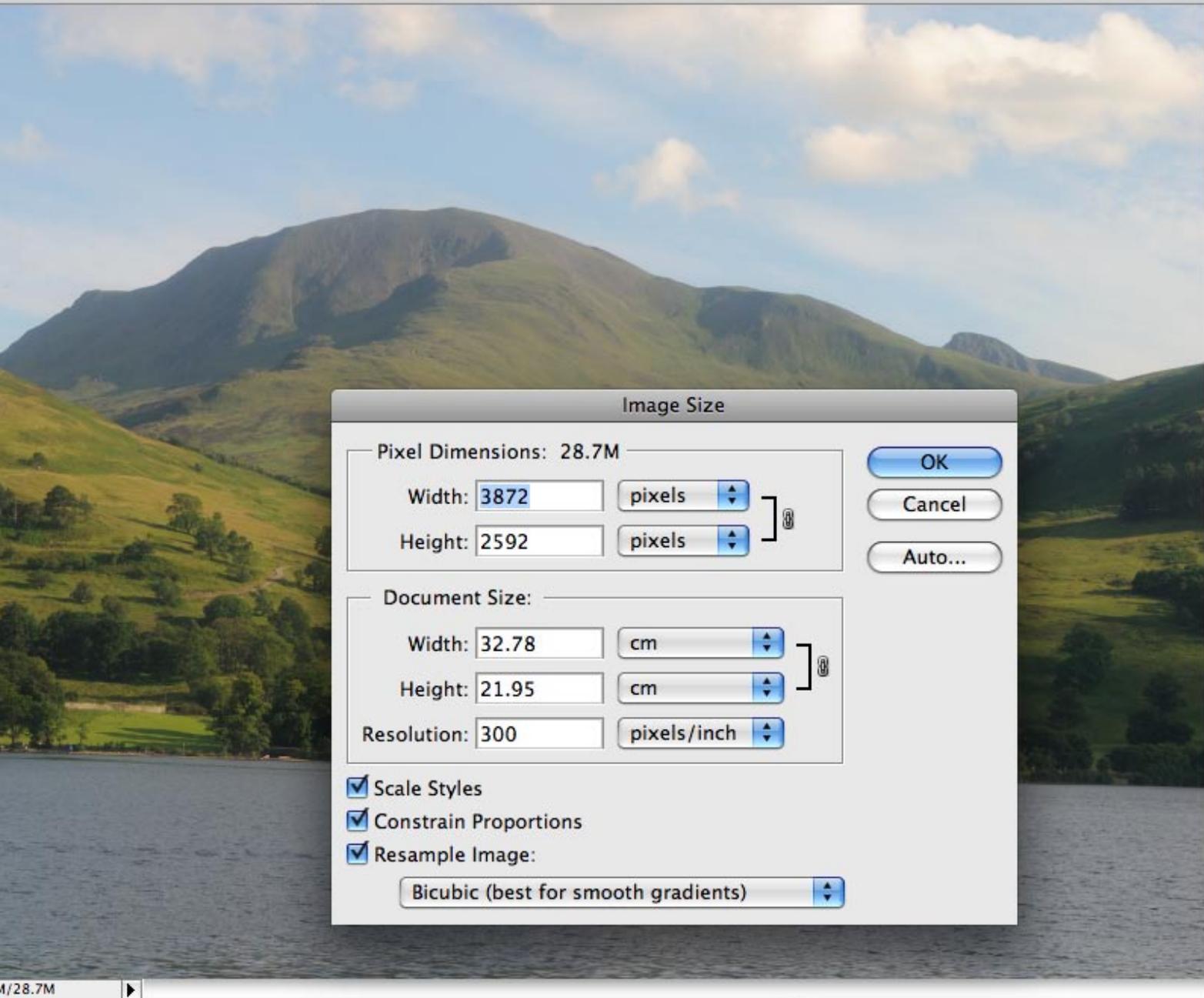
A ‘resize’ of this un-useful kind happens instantaneously, as all the computer is doing is reset the value “how far apart does the guy want us to consider the dots as being?” If you resize, and it happens at once, you probably did this non-useful sort of resize.

Rather than even thinking ‘*32 cm x 11 cm at 300 dpi*’, it’s better to think in terms of pixels. That pic of Ben Vorlich I took is 3872px x 2592px, and it stays that size whether it’s presented *3cm x 2cm at 3500 px/inch* or *3m x 2m at 35 px/inch*. Do the arithmetic:  $3872 \times 2592 = 10,036,224$  pixels, which is why it’s called a 10 Megapixel camera.

But what we usually want is a way of resizing that actually changes the size. Since we’ve already been looking at a Photoshop screen shot, let’s start by using Photoshop.

## Resize in Photoshop

The first thing to note is that we are now going to throw away some of those 10 million pixels so industriously gathered by my camera. Once thrown away, you can’t throw them back! So save the file under a new name (perhaps add “-lo” to the end of the filename) and in a different place (perhaps a folder ‘OWPGlowres’ on your desktop). Do this **before** resizing. Otherwise your prized pic of Ben Vorlich will end up only good for Facebook and blogs and never get sold to Hello magazine or Cicerone or made into a big poster for your bedroom.



Next, tick the box  
 Resample Image.

On very old Photoshop, you unclick a box called  
 preserve file size.

And now, the dialogue box lets you alter the pixels.

You can painstakingly type in 15cm wide (the height will alter to match) at 300 px/inch. Better is to go into one of the top two boxes and alter the pixel size direct. (If you like, alter the resolution first, to 72 dots /inch. Then when you put width to 500 px, you'll see how many cm wide it'll appear on a standard computer screen.)

Before hitting (Okay), check the filename at the top. I notice it's still my original filename up there. In which case I'm about to obliterate it with a low-resolution version.

That's it. Resized for the owpg profile. You might like to try hitting 'sharpen' before closing, as if a file gets downsized a lot it may go a bit fuzzy.

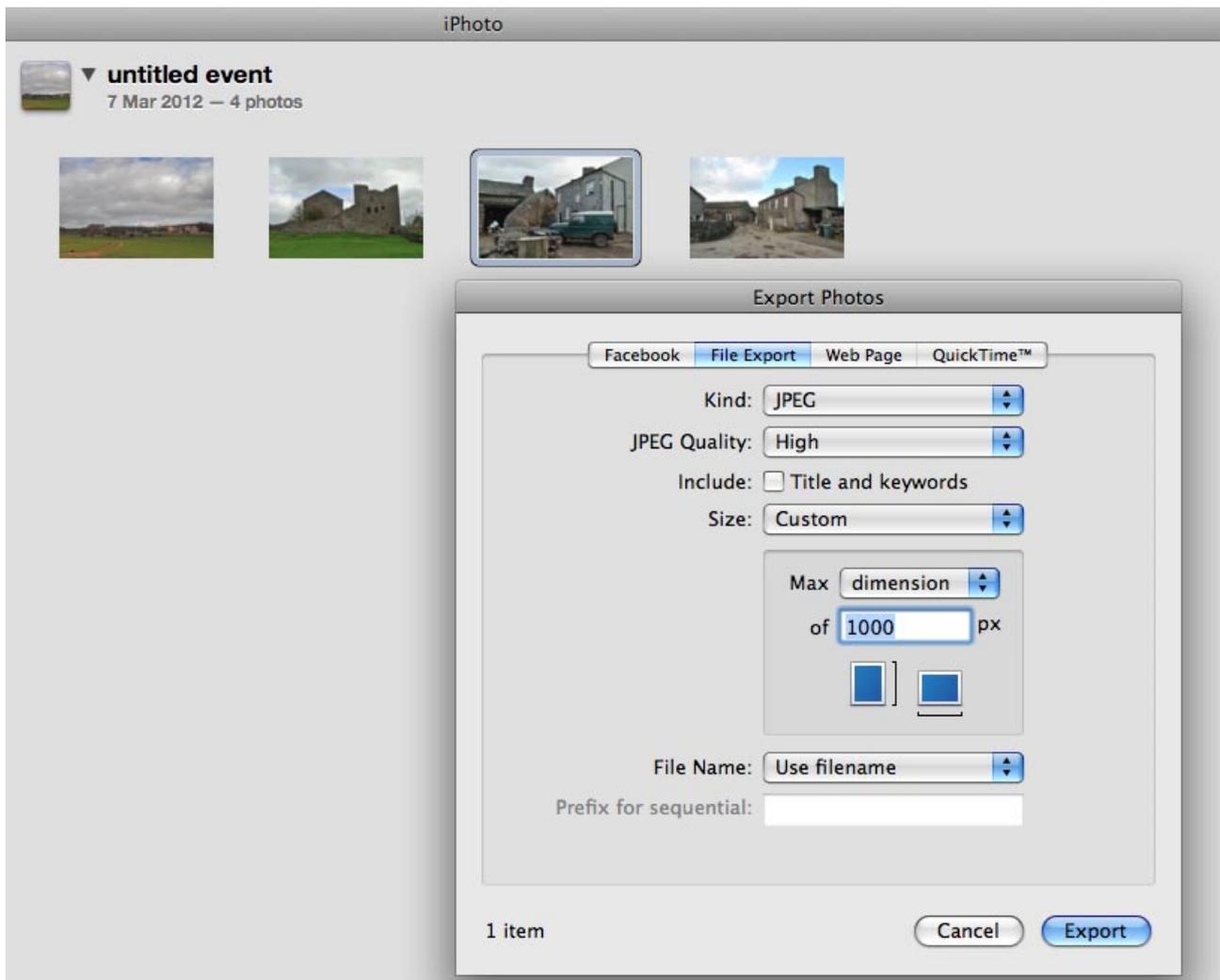
### ***Three notes***

1. You could also use this process to make a file bigger. This means Photoshop will invent extra pixels to make an even huger file. It doesn't normally make a better picture, only a bigger one. (A paid-for web resource called 'perfect resize' makes a better job of inventing extra pixels.)
2. At the top of the box, you'll see 'Pixel dimensions: 28.7M'. This is just Photoshop's tease. It doesn't mean 28.7 Megapixels - it's a 10 Megapixel pic, remember. It doesn't mean the size of your original jpeg image - my uncompressed (quality 'fine') jpeg file was 4.9 Megabytes. It means the size of the file as a Photoshop file, in Megabytes. If you were to 'save as psd', in Photoshop format, that's the file size you'd end up with.
3. If you take my original image, saved by the camera as *32 cm x 11 cm at 300 dpi*, most software (eg InDesign) will call that 32cm x 11 cm size '100%'. But when Photoshop says 100%, it means full size on screen. So if I view this image at 100% in Photoshop, it comes up at 136cm wide. Just another tease!

### **Are there easier ways?**

Any half-serious photographer needs Photoshop – the Elements version for about £100 does everything you want except one or two things left out to tempt you into the full version costing £600.

Even so, other programs do this resizing easier. And they also do a bunch at once.



## iPhoto

Put the files you want to resize in an ALBUM, and select them all. Top left in the screentop menu strip is a **file** menu. Hit **file > export**.

In the dialogue box that appears, choose

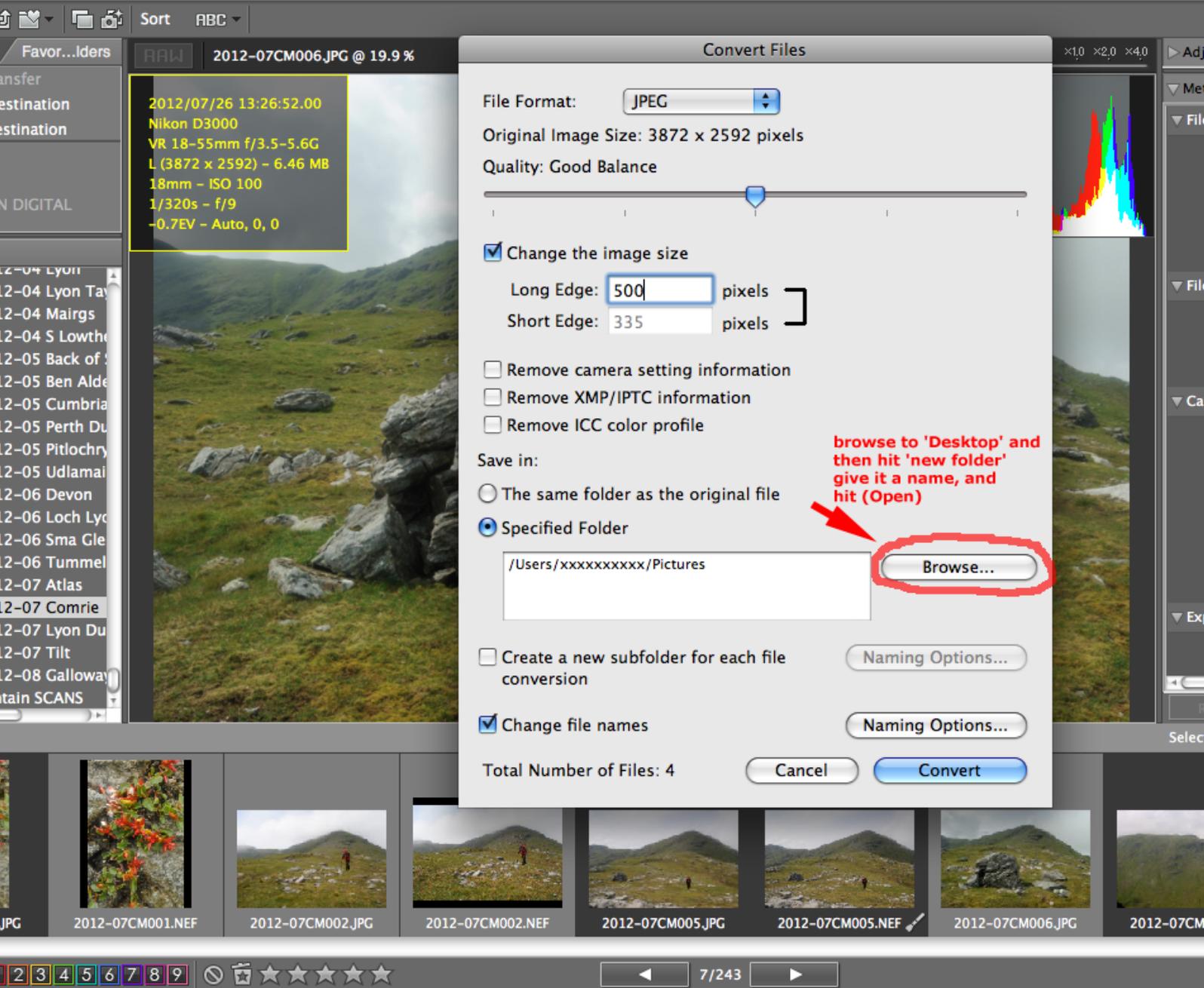
**kind:** jpeg

**JPEG quality:** medium or high (“excellent” gives a considerably larger file size for no very obvious improvement in quality)

**size:** custom; then set Max **dimension** (or width, or height) to 500 px.

After you hit (Export) in this dialogue box, it lets you choose where to export them to. Choose or create some suitable folder on your desktop. And downsize the whole lot at once.

If your images aren’t in iPhoto to start with, then copy them into a folder on your desktop, open iPhoto, and hit **file > import to library** to import the folder just as if it was a load of photos in your camera.



## Nikon ViewNX

Resizing works reasonably easily in Nikon's ViewNX software (comes free with the camera or download from their website). Navigate to the folder with your images. Click one to select it, and if you're cunning command-click (control-click on PC) on some more to select them as well.

Top left in the screenshot menu strip is a **file** menu. Go to **file > convert images**.

Select **File format** jpg

put **quality** somewhere in the middle

put **long edge** = 500px (if they're normal landscape-format images)

and select '**Save in**' as Desktop so they don't end up in some mystery folder. You can then select 'new folder' and name it 'owpg-downsized' or something like that.

In the screenshot I've used "click" then "command-click" and selected four files to resize. Alternatively, you can put copies of all the images to resize into one folder on your desktop, and navigate ViewNX to that folder.