

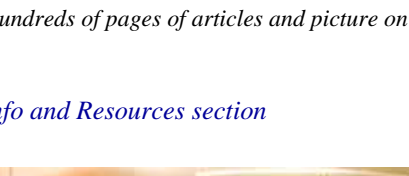
Fisheye-Hemi Plug-In review

A Photoshop plugin for 'fixing' fish-eye lens distortions

Keith uses a Canon 15mm fish-eye lens for some work with his Canon 1Ds. Whilst we've looked at using a program like DxO optics pro for things like this, the **Fisheye-Hemi Plug-In** from **Image Trends** works with any lens on any camera to 'de-fish' images - it's a fraction of the price as well. So what can it do?

Topics

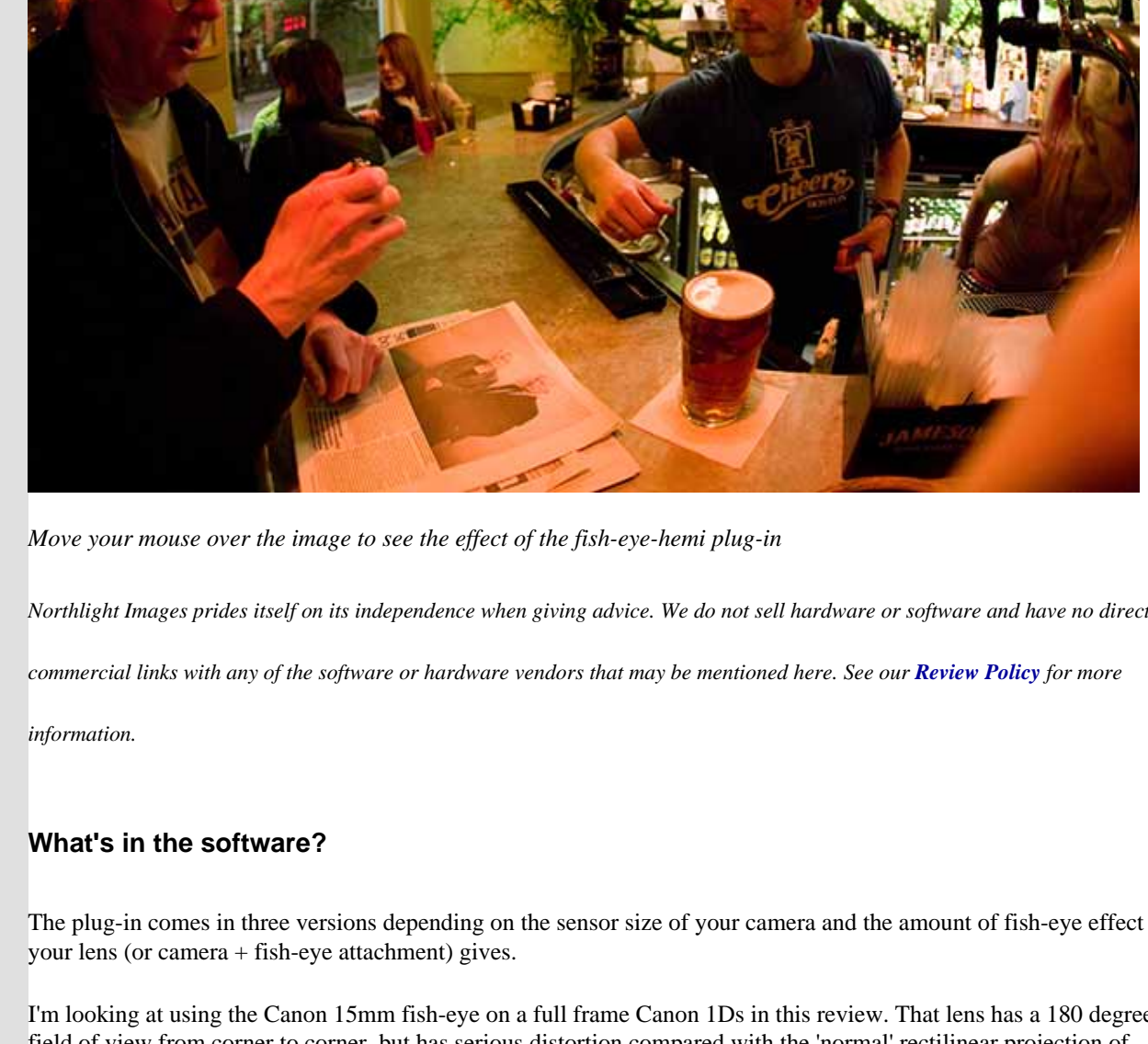
- What's in the software?
- Conclusions
- Summary
- More info



The Apple Mac version of the plugin is covered here, but the PC windows version works the same

The **What's New Page** gives a quick overview of the hundreds of pages of articles and picture on this site.

This page is part of the **Reviews** feature in our **Info and Resources** section



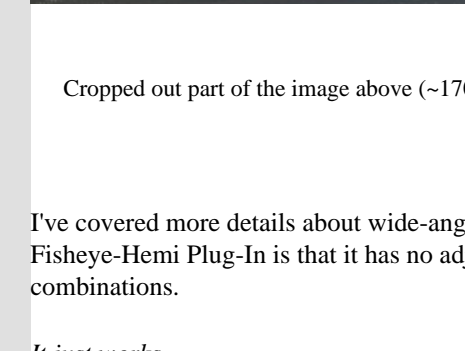
Move your mouse over the image to see the effect of the fish-eye-hemi plug-in

Northlight Images prides itself on its independence when giving advice. We do not sell hardware or software and have no direct commercial links with any of the software or hardware vendors that may be mentioned here. See our **Review Policy** for more information.

What's in the software?

The plug-in comes in three versions depending on the sensor size of your camera and the amount of fish-eye effect your lens (or camera + fish-eye attachment) gives.

I'm looking at using the Canon 15mm fish-eye on a full frame Canon 1Ds in this review. That lens has a 180 degree field of view from corner to corner, but has serious distortion compared with the 'normal' rectilinear projection of standard wide angle lenses.

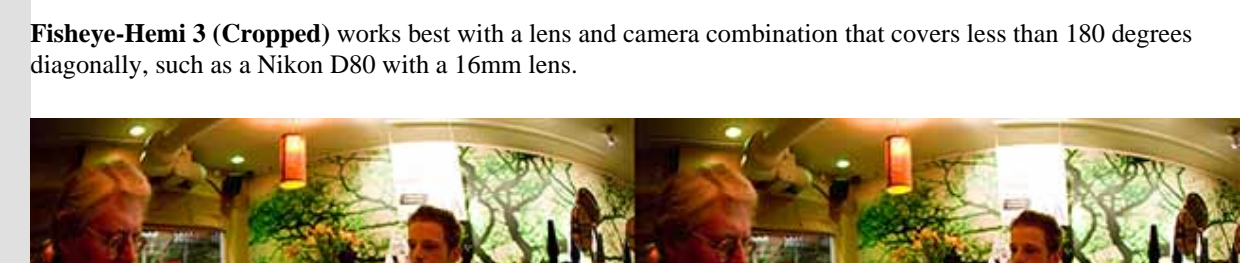


Rectilinear means that straight lines stay straight, while with the fish-eye, only straight lines passing through the centre of the field of view remain straight.

One aspect of this that people forget, is that means -any- line running through the centre axis, such as this shot which captures the whole 180 field of view of the horizon.

There is a very good explanation of the geometry on the Image trends web site

Pacific beach - North California coast



Cropped out part of the image above (~170 degree field of view)

I've covered more details about wide-angle correction in the DxO review, but the important thing to note about the Fisheye-Hemi Plug-In is that it has no adjustments, no sliders, just three versions for different lens/camera combinations.

It just works...

Taking the example shot from the top of the article, you can get three different amounts of correction - there is no 'right' amount - just what works best for your image.

The Version names refer to their suggested uses (more details later)

Fisheye-Hemi 1 (Circle) works best with a lens and camera combination that covers 180 degrees horizontally across the field, such as a Nikon D80 with an 8mm lens.

Fisheye-Hemi 2 (Full Frame) works best with a lens and camera combination that covers 180 degrees diagonally, such as a Nikon D80 with a 10.5mm lens or Canon 1Ds with a 15mm lens. This combination is commonly called a "full frame fisheye image".

Fisheye-Hemi 3 (Cropped) works best with a lens and camera combination that covers less than 180 degrees diagonally, such as a Nikon D80 with a 16mm lens.



For this picture, version (2) of the plugin works best for faces (it's the one suggested for my lens/camera combination)

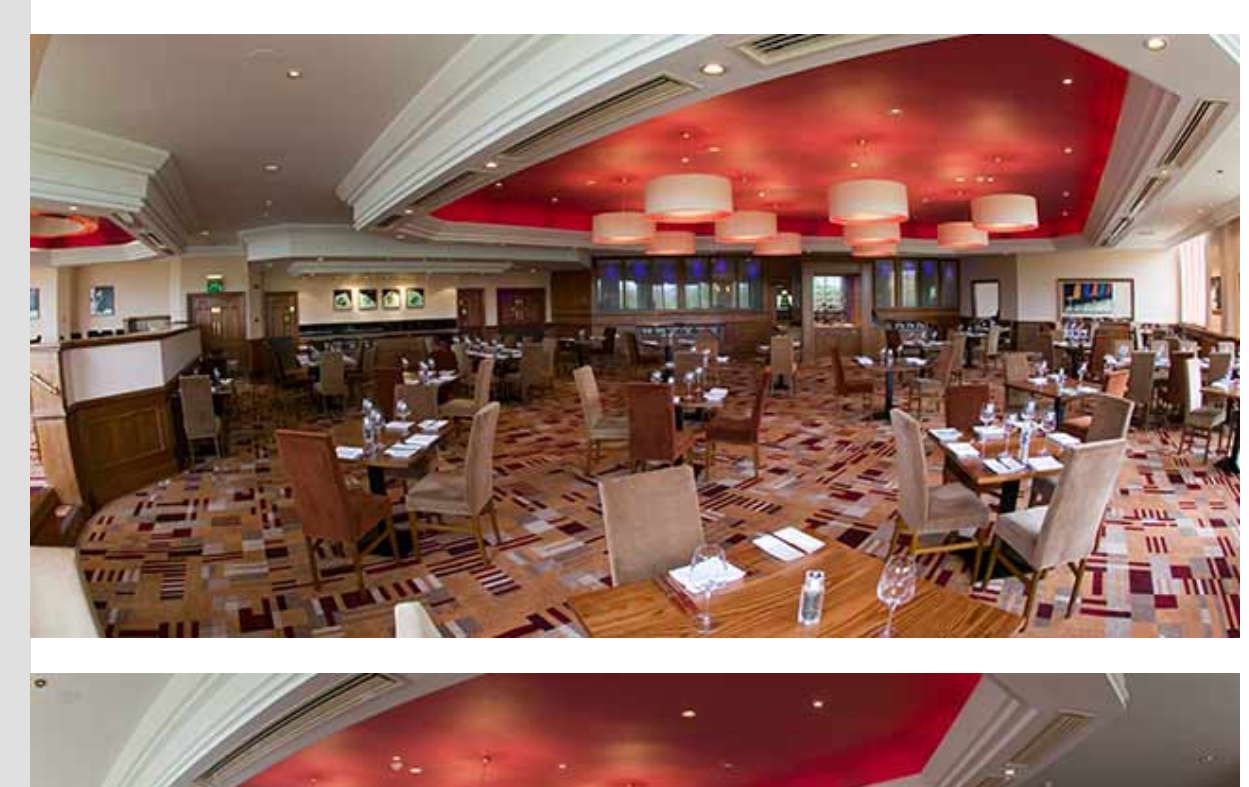
Getting people in the image to look right is one of the key strengths of this plug-in.

I'll now show some recent examples taken with the Canon 15mm.

With each image, move your mouse over it to see the corrected version.

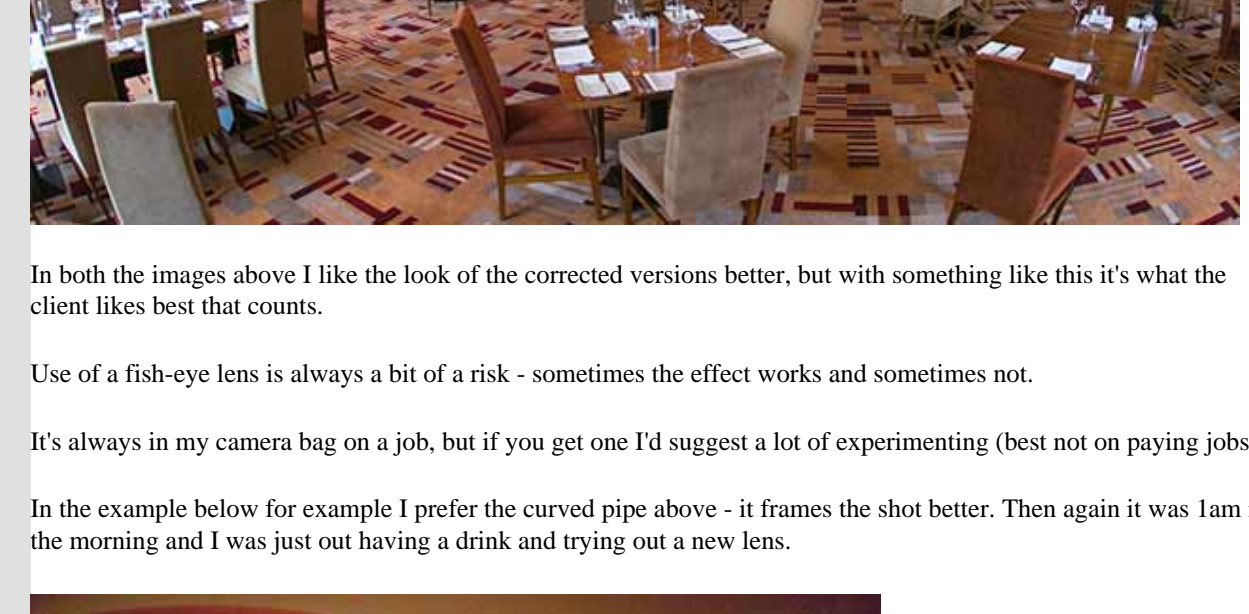


Better looking buildings



Hotel Restaurant

The next two shots show different views of the restaurant, as you might crop them for inclusion in a brochure or web site



In both the images above I like the look of the corrected versions better, but with something like this it's what the client likes best that counts.

Use of a fish-eye lens is always a bit of a risk - sometimes the effect works and sometimes not.

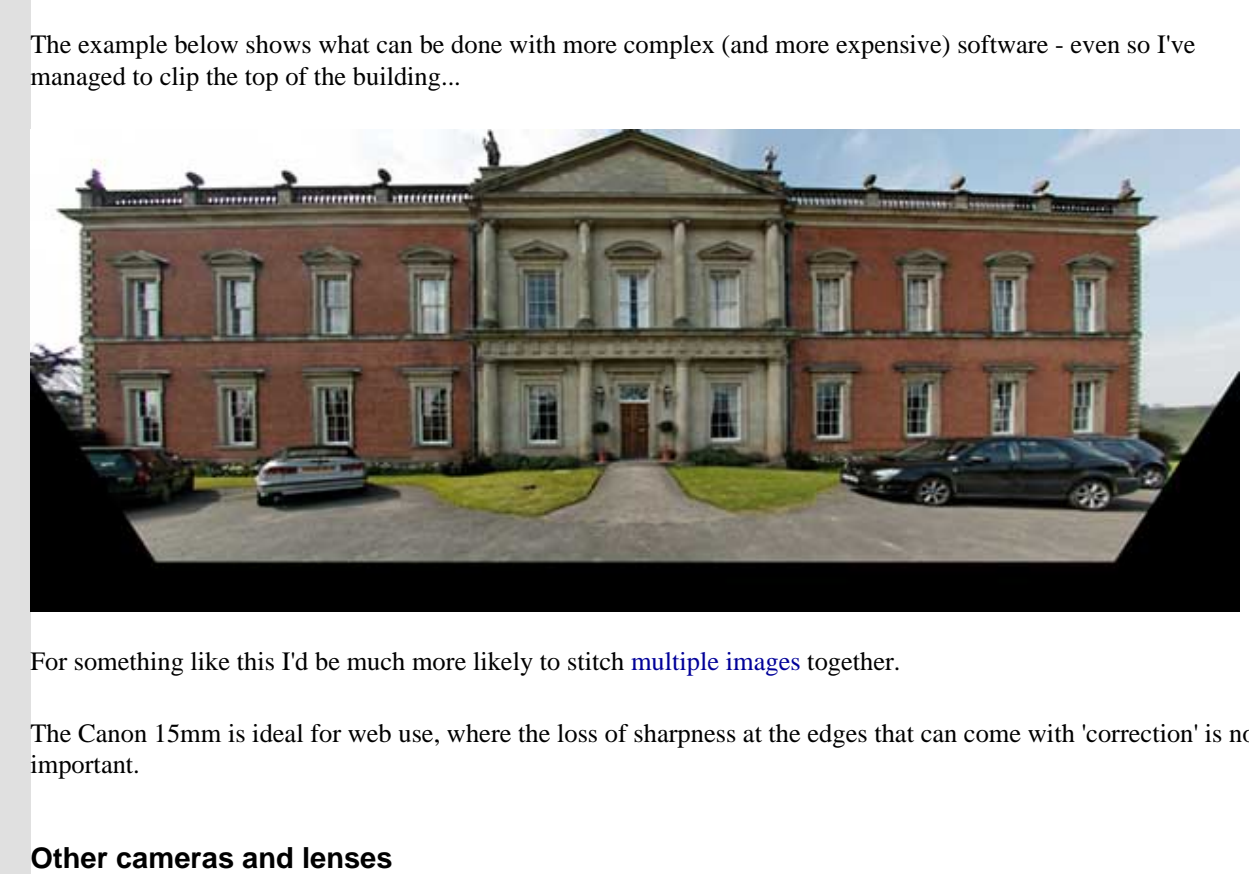
It's always in my camera bag on a job, but if you get one I'd suggest a lot of experimenting (best not on paying jobs -)

In the example below for example I prefer the curved view above - it frames the shot better. Then again it was I am in the morning and I was just out having a drink and trying out a new lens.

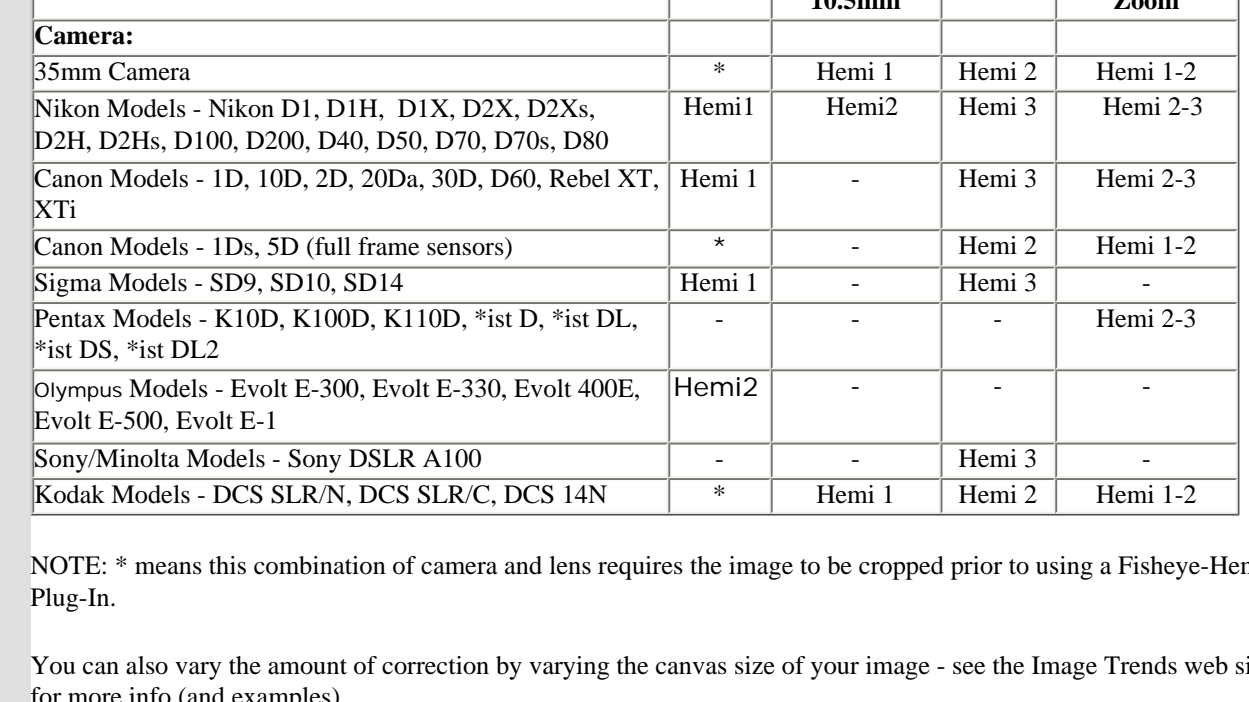


For the building below (our head office :-), well, it's just beyond the correction you can get with a 'simple' plugin

Not that the corrections in this plugin are simple - they have been optimised to give what is usually the most visually pleasing view - particularly if there are people in the image.



The example below shows what can be done with more complex (and more expensive) software - even so I've managed to clip the top of the building...



For something like this I'd be much more likely to stitch multiple images together.

The Canon 15mm is ideal for web use, where the loss of sharpness at the edges that can come with 'correction' is not important.

Other cameras and lenses

A key feature of the software is that it works with any lens-camera combination. There is plenty of **useful information** on the Image Trends web site.

This table shows the suggested choices for plugin version with different camera/lens combinations (I didn't have any of them to try...)

Camera:	Lens Type:	8mm	Nikon 10.5mm	15/16mm	10-17mm Zoom
35mm Camera		*	Hemi 1	Hemi 2	Hemi 1-2
Nikon Models - Nikon D1H, D1X, D2X, D2XS, D2H, D2HS, D100, D200, D40, D50, D70, D70s, D80	Hemi1		Hemi2	Hemi 3	Hemi 2-3
Canon Models - 1D, 10D, 2D, 20Da, 30D, D60, Rebel XT, XTi	Hemi 1		-	Hemi 3	Hemi 2-3
Canon Models - 1Ds, 5D (full frame sensors)	*		-	Hemi 2	Hemi 1-2
Sigma Models - SD9, SD10, SD14	Hemi 1		-	Hemi 3	-
Pentax Models - K10D, K100D, K110D, *ist D, *ist DL, *ist DS, *ist DL2	-		-	-	Hemi 2-3
Olympus Models - Evolt E-300, Evolt E-330, Evolt 400E, Evolt E-500, Evolt E-1	Hemi2		-	-	-
Sony/Minolta Models - Sony DSLR A100	-		-	Hemi 3	-
Kodak Models - DCS SLR/N, DCS SLR/C, DCS 14N	*	Hemi 1	Hemi 2	Hemi 1-2	

NOTE: * means this combination of camera and lens requires the image to be cropped prior to using a Fisheye-Hemi Plug-In.

You can also vary the amount of correction by varying the canvas size of your image - see the Image Trends web site for more info (and examples)

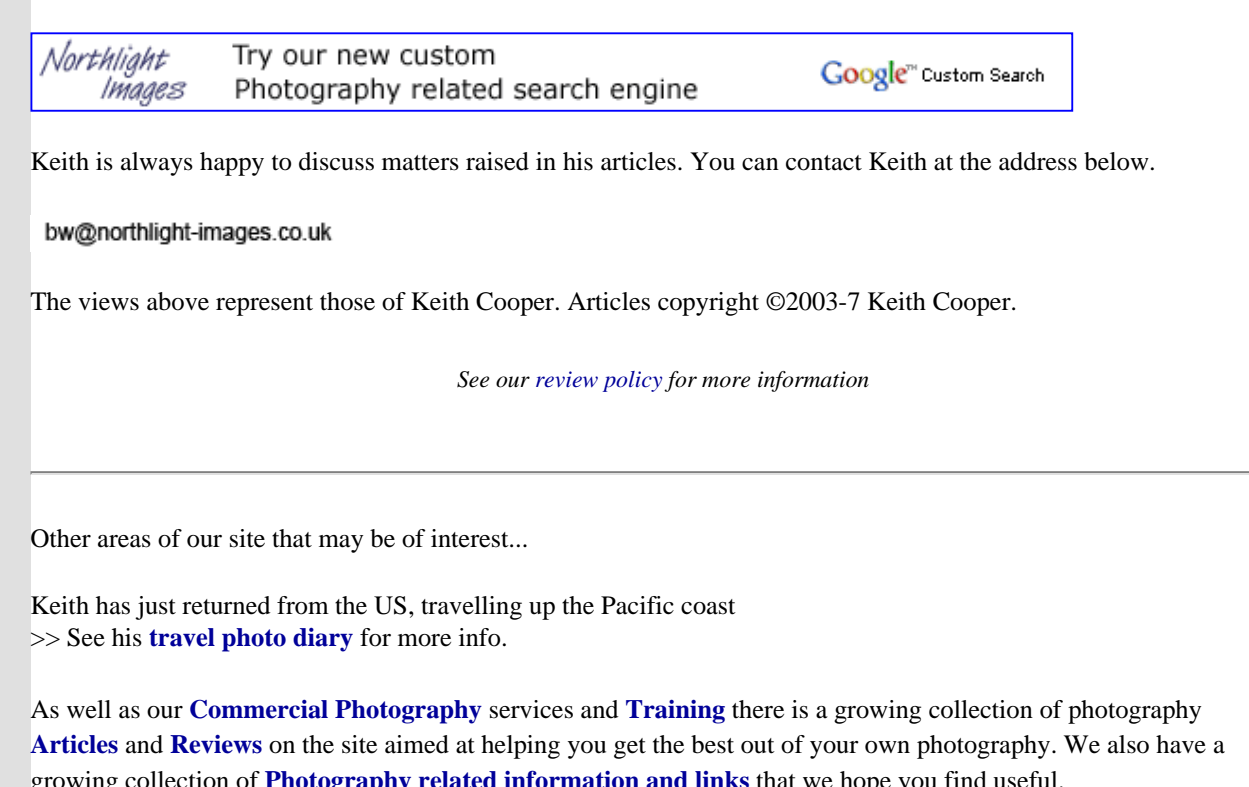
Fixing an already good lens...

I often use a Canon 16-35 2.8L lens on my 1Ds, frequently for interiors and architectural work where straight lines are quite important.

At full width (16mm) it preserves straight lines (rectilinear), but as such, distorts images of people.

In the example below, I deliberately added some barrel distortion to the image (Filter->Distort->lens correction) - before applying Hemi-3 to it. The idea is to introduce more distortion to the view, so that when you apply the plug-in, it only corrects some of what you had added.

Some straight lines are now curved, but the people look better...



Move mouse over image to see the result of adding some distortion -before- 'fixing' the image - the version you see is the result of both actions.

If you have a good 'normal' wide angle lens, this means that the chances of taking usable shots with people in them are increased...

Conclusions

Very effective image processing for quite a specialised use - just the sort of software that should help persuade more people to try the creative flexibility of a very wide angle lens and digital processing of the resulting images.

For images with people it really does look good. I fiddled around with settings on more advanced software for some time to get similar results.

Considering the amount of image processing it's doing, there is relatively little impact on image quality.

At under \$30 it's excellent value for money - just one extra picture that a client likes would more than pay for the software.

There is a **free trial** (watermarked) version of the software available on the Image Trends site

Summary

A very effective Photoshop plugin for quick and simple correction of images taken with very wide (fish-eye) lenses.

Good value at under \$30 - free demo available.

Available in both Mac and Windows PC versions.

More Info

- DxO review - lens correction and raw processing
- Stitcher Pro - stitching images together for very high quality wide angle views
- Peleng 8mm - good article on this lens - lots of useful links at the end
- Fish Eye - Wikipedia info for useful background

We have a version of Google's Search engine, optimised for photography related items that may be of use in finding more information...

Keith is always happy to discuss matters raised in his articles. You can contact Keith at the address below.

bw@northlight-images.co.uk

The views above represent those of Keith Cooper. Articles copyright ©2003-7 Keith Cooper.

See our [review policy](#) for more information

Other areas of our site that may be of interest...

Keith has just returned from the US, travelling up the Pacific coast
>> See his **travel photo diary** for more info.

As well as our **Commercial Photography** services and **Training** there is a growing collection of photography **Articles** and **Reviews** on the site aimed at helping you get the best out of your own photography. We also have a growing collection of **Photography related information and links** that we hope you find useful.

New site features and some of Keith Cooper's latest work are always covered in the **What's New** page.

Visiting Leicester or wondering where it is? We have **views from the Leicester traffic cameras**.