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7-13 MARCH 2024 ISSUE 598

Photography week



INSPIRATION | IDEAS | IN-DEPTH REVIEWS

**HASSELBLAD
907X & CFV 100C**
REVIEW: IS THIS THE
ULTIMATE CAMERA FOR
PURE IMAGE QUALITY?



THE ART OF LANDSCAPES

11 CREATIVE PROJECTS TO HELP YOU TURN YOUR
SCENIC SHOTS INTO FINE-ART MASTERPIECES

W E L C O M E

Photography Week



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Jeff Meyer, Editor

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We're more than just a magazine – read on and discover the many ways you can interact with and enjoy *Photography Week*



CONTENTS

FIND OUT WHAT'S INSIDE THIS ISSUE



FEATURE



PHOTOS



INSPIRATION



CRASH COURSE



PHOTOSHOP

REVIEW

HASSELBLAD 907X & CFV 100C

It's supremely expensive, but is this the ultimate camera for the photographer who values image quality above all else?



NEWS

TARTISAN 500MM F/6.3 FOR DSLR ANNOUNCED

Popular astro lens now available in Nikon F and Canon EF mounts

FEATURE

FINE-ART LANDSCAPES

Pro tips to help you elevate your images beyond the everyday

PHOTOS

GALLERY

Our pick of the best reader photos from around the world

INSPIRATION

FLOWER POWER

Enjoy images from International Garden Photographer of the Year

CRASH COURSE

SHARP AS A STACK

Use focus stacking to get every detail of macro subjects in focus

PHOTOSHOP

GET THE RIGHT BALANCE

Learn how correct colour casts and shift tones for creative effect

JUST
39¢/39p
PER ISSUE!
WHEN YOU SUBSCRIBE
SEE THE SUBSCRIPTION
PAGE FOR MORE INFO



WHAT'S HOT

THE WEEK'S TOP HEADLINES IN PHOTOGRAPHY

TTARTISAN UNVEILS A BUDGET TREAT FOR DSLR SHOOTERS

Popular astro lens gets new mount options, including Nikon F and Canon EF



© TTArtisan

T TArtisan has added several new mount options to its budget-friendly 500mm f/6.3, including DSLR options – a rarity when most camera and lens brands are focusing primarily on mirrorless

The TTArtisan 500mm f/6.3 Telephoto lens is an affordable super-telephoto astrophotography lens that was launched last year, and which is already available for Sony E, Nikon Z, Canon RF and L mount. TTArtisan has now made the lens available for Fujifilm X and GF, and, more surprisingly, for

Nikon F and Canon EF mounts as well.

It may be a clever move by TTArtisan, as there is still a market for DSLR lenses, and astrophotography is a genre for which the DSLR format remains relatively popular.

The 500mm f/6.3 has proved popular with existing users, offering big performance at an affordable entry point, a specialty of TTArtisan lenses. It's a manual-focus super-telephoto lens with a constant aperture of f/6.3. Constructed of eight elements in five groups, with extra low-dispersion glass,

it's marketed towards wildlife and astrophotography.

It's notable that there's also a new GF mount option. The GF mount is designed for the Fujifilm GFX system, which has a larger medium-format sensor, and a common theme with lenses that offer multiple-sized sensor options is vignetting at the larger end. However, sample images from the 500mm f/6.3 show no vignetting at infinity, which is great news for GFX users.

The TTArtisan 500mm f/6.3 is available now, priced at £409 / \$329.



© Getty

HOW TO MASTER THE ART OF LANDSCAPES

Discover how to shoot and create eye-catching images with 11 inspiring projects for taking your scenics to the next level Words by: Jon Adams and Andrew James

Capturing and editing a great landscape photograph is deeply satisfying. But attaching a 'fine art' label to it introduces an extra element that will distinguish it from a typical landscape image and elevate it into something that can be viewed again and again, standing the test of time. This timeless quality is what will make us want to frame the image and hang it on the wall, as it evokes something deeper and

more compelling than just a pretty view.

If you imagine a moment where a bunch of keen photographers arrive at the same great viewpoint, there's a good chance that they will all capture similar-looking shots. So the question is: what can you do to make your shot stand out from the rest, and earn the 'fine art' label?

This will usually come down to two factors: either the way you position

and set up your camera to shoot, or the choices you make afterwards in the way you process the files you've captured. The mysterious 'extra element' you need is hard to pin down, so we've devised a series of projects and ideas that will inspire you to seek it out, and produce landscapes with a different feel to those that are ultimately destined to find themselves consigned to the 'pleasant-but-disposable' category.



1 CAPTURE EPIC COMPOSITIONS

Take a step back, and compose your scene before you press the shutter

Before we get into the different techniques you can use to produce stunning fine-art shots of landscape scenes, it's worth going over some the essentials of photography that will stand you in good stead. The basic principle of considering your composition carefully before pressing the shutter will help to elevate your captures. Below are three reasons why this image works...

TRY AN ULTRA-WIDE

An ultra-wide-angle lens can add dynamism to your landscapes. Technically 'rectilinear' lenses, they're designed to keep lines straight for the most accurate rendition.



Captured with a Canon EOS 5D Mark III and Canon EF 14mm f/2.8L II USM lens at a low angle on a tripod, this carefully composed image also benefits from a long exposure to create movement in the water, resulting in a fantastic fine-art landscape photo

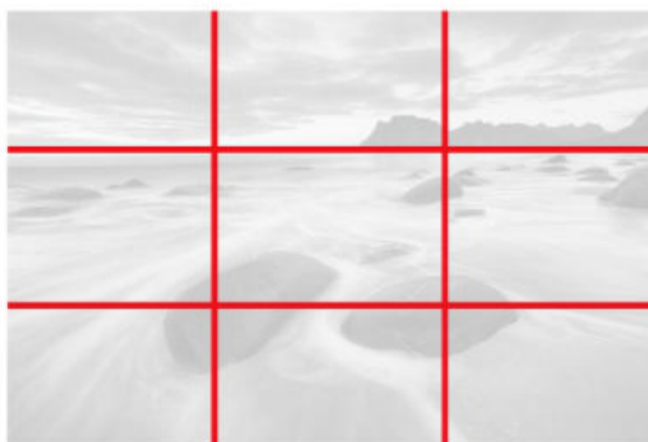


PRO ADVICE THREE TIPS FOR SUPERB SCENICS



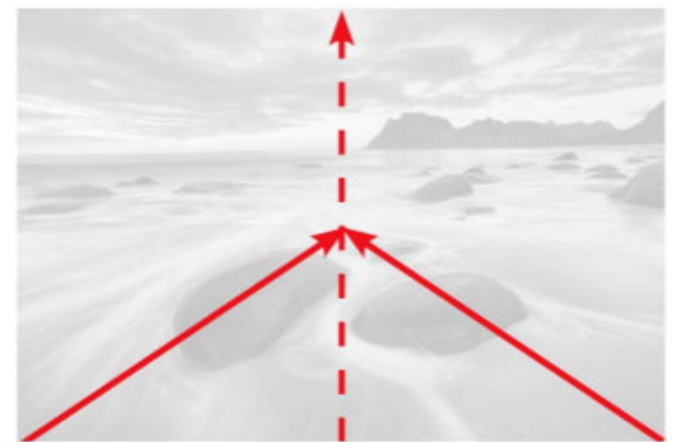
1 FOCAL POINTS

At your location, study the scene so that you can find focal points to base your shot around. Here, note the triangulation of focal points: the two stones in the foreground were chosen as the main focal point of the photo; as a long exposure was envisaged, it was evident that the water would look dynamic around these stones.



2 COMPOSITION

This image is a great example of using the rule of thirds to good effect. As seen above, the horizon and the two stones neatly fit into a rule-of-thirds grid, making this image well balanced. Many cameras have a rule-of-thirds grid overlay in their viewfinders, which is a very useful feature for photographers who shoot landscape scenes.



3 LEADING LINES

These are important for leading the viewer into a shot. As you can see above, the two main rocks draw the viewer up the central axis of the image towards the outcrop in the distance. As well as introducing movement and action, the use of a long exposure creates additional leading lines in the water, helping to draw the eye to the horizon.



2 FRAME LIKE AN ARTIST

Think of a scene as a selection of shapes, and arrange them with careful camera positioning



Taken in Namibia, with the sun low in the sky, this mono image was enhanced in raw processing to boost the contrast, to reveal the shapes in the scene and create a full range of tones

PRO ADVICE KEEPING IT SIMPLE

Focusing on the lines and shapes within an image in the viewfinder will help you to simplify the composition and draw your viewer into the scene. Here, in this vertical image, the curved leading line takes you to the dune highlight and then along the ridge. Your eye is gradually drawn in from the bottom left of the image to the top right. This is a great example of a simple, but really graphic, strong contrasting shot.



A brief glance through a variety of 'classic' landscapes will reveal that they're beautifully composed, not too cluttered, and show a pleasing balance of the key shapes within the frame. In most cases, there's some strong foreground interest that catches the viewer's eye and leads it to a secondary point of interest further back in the scene. This might be leading lines that carry you into the rest of the scene, a strong foreground 'anchor', such as a gnarly rock or other object, or some more delicate detail or texture close to the lens.

When you've found one of these devices to lure the viewer into your scene, make sure you position it so that it complements other elements in the frame, and, if you use lead-in lines, make sure they go somewhere, and don't take the eye out of the frame. Another vital element is the lighting – most landscapes are taken in the hour after sunrise or the hour before sunset, when the light is warm and the shadows are long thanks to the low position of the sun in the sky.



3 SMEAR YOUR WAY TO SUCCESS

Employ an age-old technique to add artistic blur to a scene and conjure up a romantic, diffused mood



© Getty Images

Give your floral scenics an arty twist with this proven technique. Experiment to see how you can blur the background while keeping the focal point pin-sharp

While this is one of the oldest tricks in the book for getting an arty soft-focus appearance in your images, it can still work an absolute treat, so let's revive this tried-and-tested technique. All you need is some petroleum jelly (such as Vaseline) and something you can smear it on that will then fit over the lens. Obviously, it's possible to smear the jelly directly onto the glass of a lens, but this could potentially damage an expensive optic so is best avoided. Instead, you could use an old UV filter that's been scratched and is no longer in use.

Early uses of a 'gel' filter were to create a softening effect for portraiture, but this technique can work equally

well for fine-art landscapes, especially where there's a main focal point, like a flower, within the scene. For this poppy shot, the camera was placed on a tripod to fix the composition. Using Live View, it was easy to see the effect of the gel being applied in real time. You need to work reasonably quickly when smearing the lens, because the gel starts to dry and becomes less malleable.

Small dabs of jelly gently spread out around the poppy created extra blurring and a slight desaturation of the background colours, too, giving the image a slightly surreal appearance. This shot was taken at f/5.6 but, at a glance, you'd think it was at a larger aperture, such as f/2.8.

HOW TO APPLY THE GEL TO A LENS FILTER

An old UV filter is the best option for placing the petroleum jelly over the lens, but you'll need some alcohol wipes to hand to clean it off afterwards, and to keep your fingers clean to avoid transferring any grease to your camera or clothes. Apply the jelly around the filter with the tip of your little finger, leaving a clear area where your main subject is. Do this carefully – if you add too much, you'll have to wipe it all off and start again.



F E A T U R E

4 PLAY THE LONG GAME

Accentuate movement with a long exposure



Here, a long exposure achieved with a 10-step graduated ND filter has added dynamism to the clouds as well as the water



Shoot a moving element within your scene with a long exposure and you'll capture an intriguing sense of energy. This might be a flowing stream, but even the apparently still waters of ponds and lakes can soften and blur when the exposure time runs into minutes because their surface is constantly moving, even if you can't see it. Within a landscape, we also have

other elements like wind-blown trees, crops, or even clouds scudding across the sky that can be similarly softened. To achieve a long exposure, even in normal daylight conditions, you need a specialist filter to hold back light.

Neutral density filters come in varying strengths, but for really long exposures you'll need a 10-stop ND. Some are circular and screw directly

onto your lens (you'll need to buy the right filter size), but others may need a special filter mount. When using a 10-stop ND, you must use a tripod and cable release so the camera isn't joggled when you take the photo. If the exposure you get is more than 30 seconds, you'll also have to use the camera's Bulb mode, which keeps the shutter open until you close it manually.



5 SPLIT-TONE A MONO SCENE

A black-and-white rendition is a surefire way to add timeless appeal, but split-toning takes moody mono to new heights

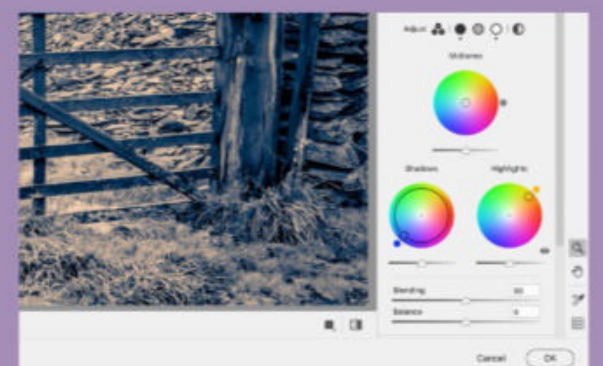
Split-toning adds different colour washes to the shadows and highlights, adding extra interest to a black-and-white photo



© Jon Adams

PRO ADVICE TONING IN RAW

The split-toning options can be found in the Color Grading panel. With the Adjust option, you'll be presented with three colour wheels for Midtones, Shadows and Highlights. Ignore the Midtones, and click inside the Shadows wheel to pick a colour. With the Shadows set (in this example) to blue, click inside the Highlights wheel to choose a colour for the lighter tones in the scene (such as the warm yellow-orange here). Now move the Balance slider below to set the transition point between the colours for a split-toned look.



After you've made a mono conversion to give a colour landscape an artistic appeal, there's another processing technique you can employ to take your photo in a new direction. Split-toning assigns different colours to the highlights and shadows in your image, so instead of applying a single toning treatment (as you would with sepia- or blue-toning), you can tint both tonal ranges at the same time. Although you can use any colour, split-toning is best when opposite (or complementary) colours are used. That means going for blue-yellow, red-cyan, or green-magenta splits,

though the most successful is usually blue-yellow, as this creates cool-toned shadows and warm-toned highlights, both of which are traditional treatments.

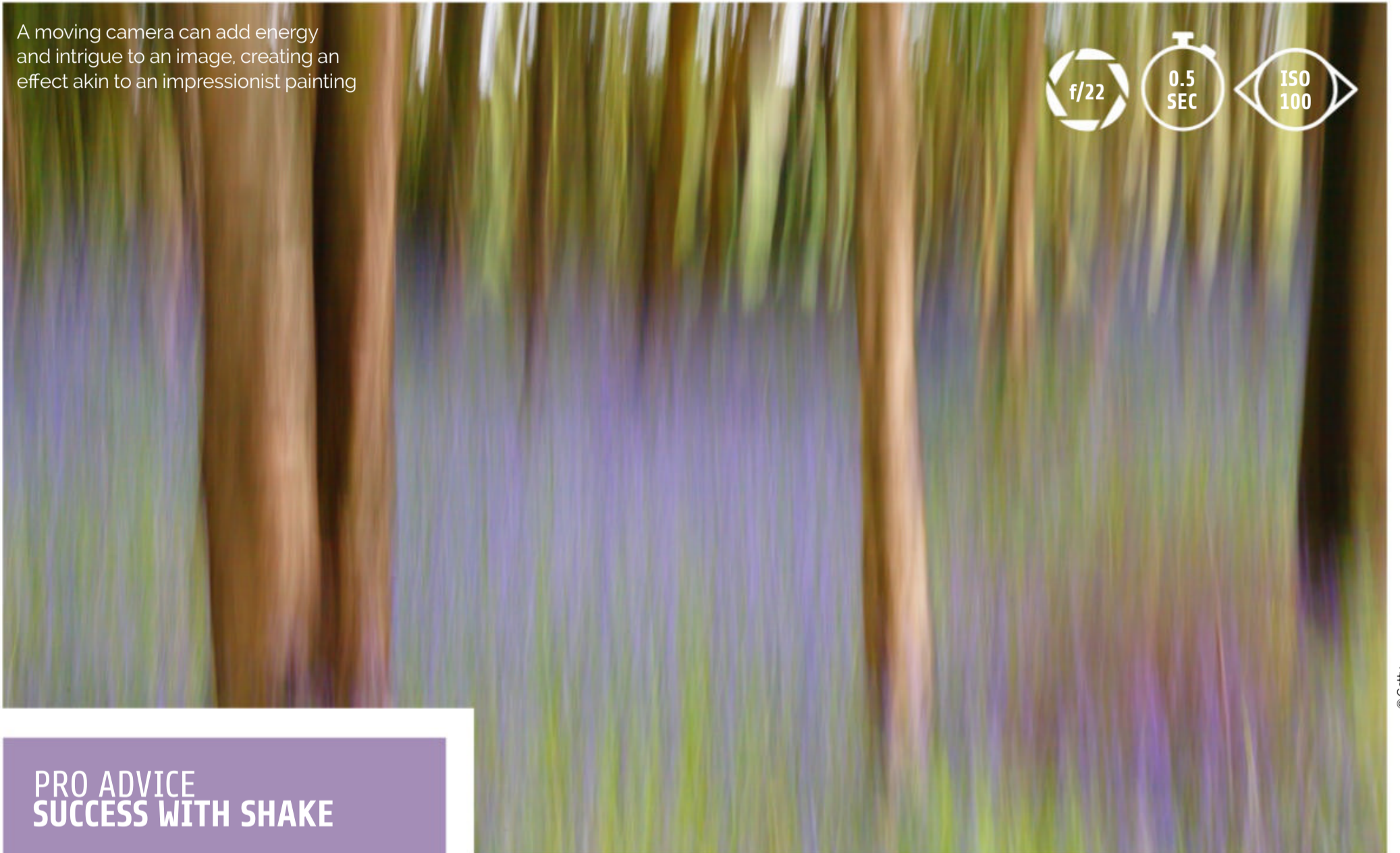
First, make a mono conversion that's rich in contrast and detail. To do this with a colour raw file, open the image in Camera Raw and select the Adobe Monochrome profile. In the Basic panel, adjust the sliders for good contrast and detail, then tweak the colours in the Black & White Mixer panel to assign your preferred grey tones to the colours in the scene. With the conversion complete, add your split-toning treatment to the mono image (see panel).



6 PAINT WITH YOUR CAMERA

While it's something that photographers usually try hard to eliminate, camera shake is the effect that's desired here

A moving camera can add energy and intrigue to an image, creating an effect akin to an impressionist painting



© Getty

PRO ADVICE SUCCESS WITH SHAKE

Getting the right combination of shake and shutter speed involves a delicate balance, and unfortunately there are no hard and fast rules that you can follow, as there are too many variables at play.

The focal length has a big impact – a telephoto will magnify the movement and a wide-angle lens will suppress it – so the more you zoom out, the more camera movement you'll need for the effect to have an impact. Most people find that a shutter speed of around 1/15 sec is easier to control than slower ones, so starting around that mark and making more or less intense movements will start you on the way to exploring the art of camera movement.



It's no secret that fine-art photography takes its cue from the Old Masters, and although a camera, rather than a paintbrush, is your tool, that doesn't mean you can't get 'painterly' in the way you capture. Many artists see simplicity and a lack of definition as a way of capturing an impression of a scene, and by reducing or removing the hard edges of reality, impressionist-style pictures can be created in-camera.

To get swirls, blurs and streaks in your shots, move the camera at the moment of exposure. This may be at odds with the standard way of taking a photo, where we aim to get the subject as sharp as possible – but in the search for that elusive fine-art ingredient, this technique can be successful.

To pull off such a shot, use a slower shutter speed than normal, and 'jitter' a handheld camera as you press the shutter. The results can be hit and miss,

but by varying the shutter speed and the amount of 'jitter', you can work towards a solution that gives an arty rendition of a scene without the detail normally seen.

Although the technique is similar to the one used for blurring trees (see the next page), the camera movement used is different, and can vary from roughly circular sweeps to a deliberate shake. To see how well it has worked, always zoom in on the screen and inspect the hard edges in the shot – these will reveal the type of motion that you've captured.

To set up for a jitter shot, use Aperture Priority mode and dial in the smallest aperture available (usually f/22). Now set the lowest ISO value (usually ISO100) and your camera will set the slowest possible shutter speed for the light conditions. Start your intentional camera jitter, then press the shutter button, continuing the movement until the shutter closes. Check the screen, then reshoot with different amounts of jitter or a different aperture.

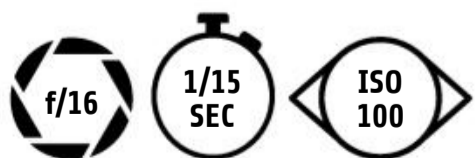


7 TILT FOR TREES

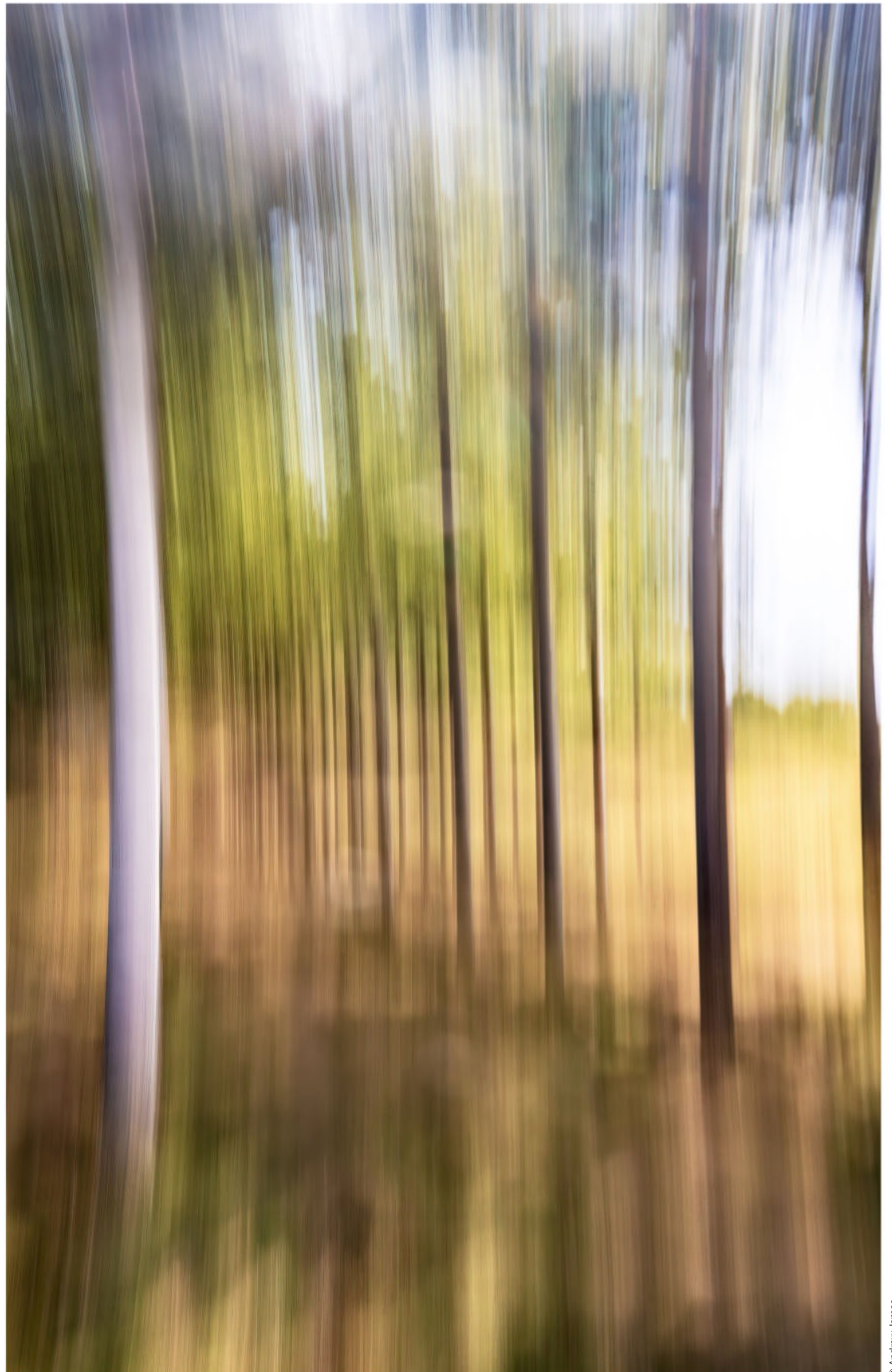
Use vertical intentional camera movement for magical tree images

Deliberately moving the camera up and down during the exposure to create 'streaking' abstract trees is an easy way to create something visually arresting. For this intentional camera movement (ICM) technique, you need a shutter speed of about 1/15 sec and a smooth camera action. The most important part is finding the right trees in the right light. If the trees are tonally similar to the background, the image can look muddy and unappealing. Instead, find strong shapes and good contrast – tall, thin-trunked trees are best, and, where possible, have light-coloured trees against a dark background or dark trees against a bright background.

Framing your shot with a moving camera isn't a precise skill, but having some ground in the frame gives the composition a base, and a receding line of trees accentuates depth. This technique works with any lens, but a short telephoto lens in the 70-200mm range will help you pick out an interesting section of woodland. The trick is to keep the camera movement smooth, so repeat the up-and-down camera movement until it feels natural. Press the shutter after you've started the movement, taking care not to jerk the camera with your shutter finger, and take multiple shots before checking the results.



Smoothly moving the camera in an upward or downward motion during the exposure will create an arty, streaked effect



8 ADD ATMOSPHERE WITH FLARE

Add some extra sparkle to fine-art landscapes with an in-camera starburst effect



© Andrew James

Photography tradition dictates shooting with the sun behind your shoulder so that you're capturing your subject with the light falling directly onto it. While this approach usually makes sense, try going against the grain and shooting into the light. This is also known as 'contre-jour', which means 'against

the day'. Shooting like this can be challenging, as it's easy to end up with an image that's too dark, so you may need to dial in some positive exposure compensation to brighten your shot.

To achieve the starburst effect, you'll need to use a small aperture, such as f/11, as this helps to control the light. The small aperture only allows a narrow hole

for the sunlight to pass through, and this causes the light waves to spread out and create the starburst effect.

The exact pattern you get is dependent on the number and design of the aperture blades inside the lens, but as a general rule, a wide-angle lens is the best optic to use to create this atmospheric look.



9 SHOOT FOR A TRIPTYCH

Create a visually stimulating piece of artwork that would be worthy of hanging in a gallery, by displaying three related photos together in a single frame

Normally, we try to get everything we want from a scene into a single frame, but we don't always have to take this approach for our image presentation. A triptych is simply three separate images displayed together for a fresh visual perspective. You can opt to show part of a wider scene, and then some of the smaller details that would be less obvious had you chosen to photograph the location with a wide-angle lens.

How you creatively explore the potential of a triptych is up to you, but a standard approach would be to have three vertical images displayed next to

each other, as in the below triptych of ancient rocks in England.

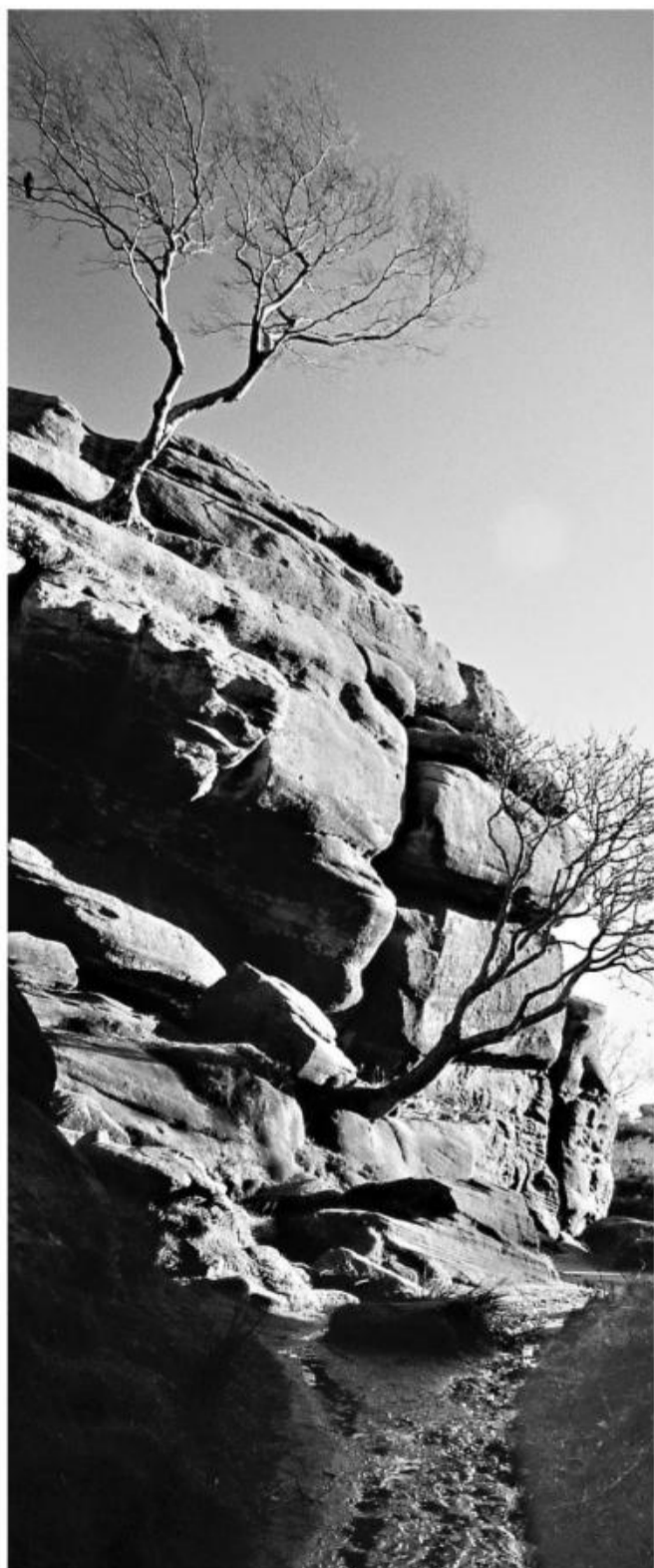
As a rule, upright images are going to work best if you want each part of the triptych to be identical in size, so walk around the scene picking out various things that will work together tonally, as this will help you to knit the finished triptych together.

It's also likely that you'll need to crop the original shots to make them slimmer, and this is worth remembering as you're composing your pictures. Sometimes the biggest headache you'll have with a triptych is deciding on the sequence of the three images you've selected, and it helps

to print out all the photos and play around with the order until you feel you've found a balanced composition; in general, the most dominant shot should be placed in the centre.

PRO ADVICE FRAME UP

In Photoshop, choose a document size and go to View > New Guide Layout. Select 3 columns and 1 row and set the Margin values. With the Rectangular Marquee tool, draw a selection within the markings. Copy your first image and, using Edit > Paste Special > Paste Into, drop it in place, resizing it with Edit > Transform > Scale. Repeat for the other shots.



10 CREATE MULTI EXPOSURES

While you can achieve this effect in-camera, Photoshop layers and blending modes let you generate arty effects from a single shot



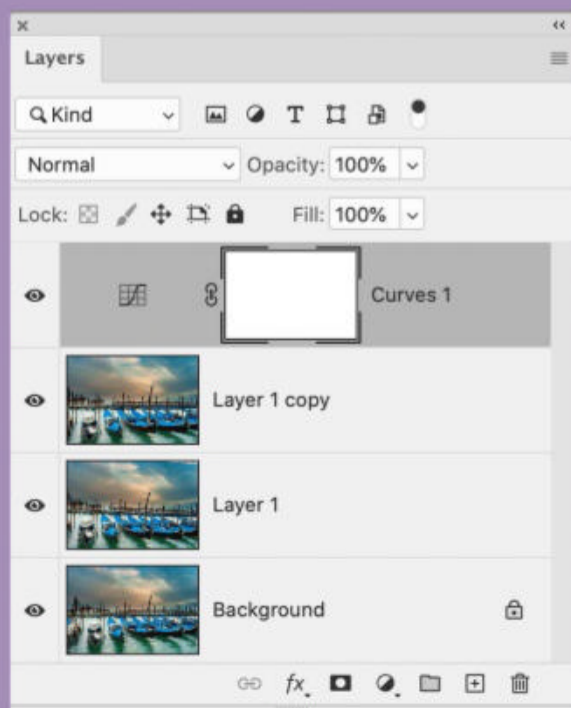
Using three blended layers of the same shot, two of which are enlarged and rotated, creates an indistinct and artistic impression of a well-known Venetian scene



© Jon Adams

PRO ADVICE USING LAYERS

Making a three-layer stack of the same shot, and changing the size, rotation and blending mode of the top two layers, will give an impressionistic rendition of the scene. A final Curves adjustment layer on top lets you control contrast.



Blending similar shots of the same scene, taken from slightly different angles, gives a unique and dramatic effect that forces the viewer to do a bit of 'mental processing' to grasp the content and form of the image. It takes some time to achieve a satisfying result using a camera's multiple exposure mode, but by using layers in Photoshop you can control the outcome with precision and, even better, do it with a single source photo. It's best to use a picture with strong lines and strong detail, such as an urban landscape, but once you have your starting point on the screen, the process is easy.

To start, duplicate the image by pressing Ctrl/Cmd+J, and in the Layers panel change the blending mode of the duplicate layer to Soft Light. Now hit Ctrl/Cmd+T for Free Transform, pull out the corners to enlarge the image a little, and drag outside the bounding

box to add some rotation. Hit Return to apply the changes, and then repeat these steps with a second layer, this time rotating it in the opposite direction. You can change the blending mode of one or both duplicate layers to create different effects, and you can also fine-tune the position of the two duplicate layers by selecting the Move Tool, and dragging the layers or tapping the arrow keys.

Once you have a pleasing blend, you'll need to adjust the contrast of the blended image. To do this, click on the top layer, click the Adjustment Layer icon at the bottom of the layers panel, and choose Curves from the list. In the Curves panel, add two points and drag to create an S-curve to change the contrast. If you want to adjust the colour mix too, click where it says RGB and select the red, green, or blue channel, adjusting the curve in the same way to boost or reduce the contrast of the selected channel.



11 PRESENT YOUR PICS LIKE A PRO

Give your photos a 'published' appearance by mounting them on a digital canvas and adding a title and credit



Printing your image with a black border, a title and a credit will give it an artistic lift, and framing it will finish the job off in style

© Jon Adams

It shouldn't come as much of a surprise, but a well laid out, well-presented photo gets an immediate head start on the competition. It looks more considered and more serious, and that grabs attention if you're seeking 'fine-art' status. The easiest way to achieve this

is to create a new canvas in Photoshop (to match your printer's paper size) and then copy and paste your image into it. Using the Transform command (Ctrl/Cmd+T), you can adjust the size of the image to suit the canvas, leaving a clean white margin around the edge. By selecting the image area, you can

add a thin border via Edit > Stroke and, if you want to give your shot a 'poster' feel, you can add a title beneath the image, and even add a photographer's credit. If you're wondering whether a particular shot will make the grade or not, presenting it in this way could help you to decide.

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G A L L E R Y

XPOSURE

THE WEEK'S MOST INSPIRING READER PHOTOS



OUTDOOR NATURE

DIRK BUSE

"I took this photo at a botanical gardens in Münster, Germany."

<https://bit.ly/48vygKR>

G A L L E R Y

THE WEEK'S MOST INSPIRING READER PHOTOS



ROTTERDAM CRUISE TERMINAL

MARK GREENFIELD

"A fine-art photograph of the cruise-ship terminal in Rotterdam."

<https://bit.ly/3v1BExw>

G A L L E R Y

THE WEEK'S MOST INSPIRING READER PHOTOS



RED MUSHROOM

ALEXANDER FENZL

"I photographed this mushroom with my Nikon Z6 and 150mm f/2.8 lens."

<https://bit.ly/3lnVBry>

GALLERY

THE WEEK'S MOST INSPIRING READER PHOTOS



THE BEECHES

NEIL SHAW

"A different take on a scene that I've photographed often. I've gone somewhat 'Insta' with the processing, which seems an increasingly common style for landscape photographers these days."

<https://bit.ly/465WxJa>



FACEBOOK

<http://bit.ly/39py9lg>



FLICKR

<http://bit.ly/2VlgsJ0>

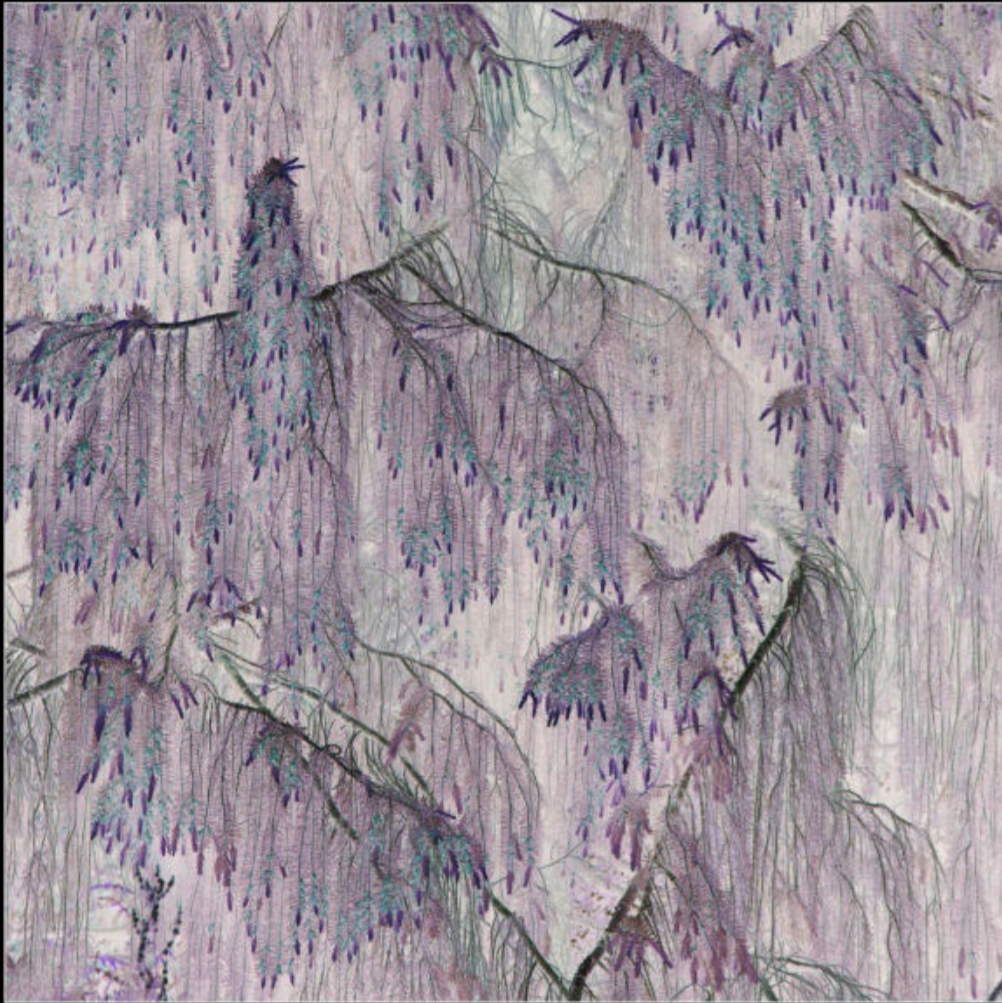
PHOTOGRAPHY WEEK WANTS YOUR PHOTOS!

Taken a portrait you're particularly proud of? Shot a sensational sunset you'd like to show off? Then join the *Photography Week* Facebook community and share your best photos today! You'll get feedback from fellow readers and the *Photography Week* team, plus the chance to appear in *Xposure*, or even on our cover!

I N S P I R A T I O N

IT'S COOL, THAT

THE BEST THING WE'VE SEEN THIS WEEK



Birdscape by June Sharpe, Overall Winner



Tasty by Fernando Avanka, 1st place, Wildlife in the Garden



Cosmos 'Apricotta' by Molly Hollman, 2nd place, Beauty of Plants



Deadvlei Pan by Robin Williams, Finalist, Plants & Planet

AMAZING IMAGES CELEBRATE ALL THINGS BRIGHT AND BOTANICAL

International Garden Photographer of the Year reveals stunning winners

International Garden Photographer of the Year has revealed the winners of its IGPTY 17 contest, showcasing another spectacular selection of images of flowers, plants, gardens, fungi, woodlands, and just about anything else you can think of that grows.

This year's overall winner was June Sharpe, for her intricate abstract image of layered conifer branches, which, she says "reminded me of the dancing cranes often

featured in Japanese woodcuts". She processed the image, entitled *Birdscape*, to alter the colours and "enhance the feeling of movement and sense of the 'birds' dancing in a fantasy woodland".

Prizes are awarded across categories including Beautiful Gardens, The Beauty of Plants, and Wildlife in the Garden. Click the link to see more images at the IGPTY website, where you'll also find details of how to enter upcoming competitions.



SEE MORE IMAGES
<https://bit.ly/3v0VUA6>

S K I L L S

CRASH COURSE

ESSENTIAL PHOTO SKILLS MADE EASY

FOCUS STACK



SHOOT SUPER-SHARP CLOSE-UPS

Can't get everything in focus? Adam Waring shows you how to focus-stack images for incredible front-to-back sharpness

A macro lens enables you to focus extremely close to a subject so that it's reproduced at life-size on the camera sensor, opening up a world of incredible detail that's impossible to see with the naked eye. The drawback is that at such close focusing distances depth of field becomes extremely shallow, and will be only a matter of millimetres even if you stop down to a narrow aperture – so all that detail is lost from all but a very narrow band of sharp focus.

The solution is focus stacking. Take a series of shots, each at a slightly different focus distance, then combine the images to include the sharpest elements from each shot. It sounds complicated, but all the hard work is easily done in software, and it's a largely automated process.

You simply focus on the closest part of the image, take a shot, then twist the focus ring a tiny bit and take another shot, repeating the process until the most distant part of your subject is in focus. Some new cameras make things even

easier with 'focus shift' shooting modes which automatically takes a series of shots, each at a slightly different plane of focus.

Macro photography is just one application of focus stacking; it can be used for any subject where you can't get enough depth of field in a single frame, such as landscapes in which you can't get both distant mountains and foreground rocks sharp without encountering diffraction, an optical anomaly that causes softening of images at narrow apertures. Here's how we created the image above...



SKILLS

STEP BY STEP STACKING FOR SHARPNESS



1

GET SET UP

We're using a Sigma 105mm f/2.8 Macro lens, but any close-focusing lens works for this technique – even a kit lens, which can focus at around one-third life size. Use a tripod to keep your camera steady, with the subject positioned so that everything fits in the frame.

2

CAMERA SETTINGS

Switch to Manual mode so that each shot has the same exposure, and set an aperture of f/11 for optimum sharpness, along with ISO100 and a matching shutter speed. Flick the switch on the lens barrel to manual focus, and focus on the closest part of the subject.



3

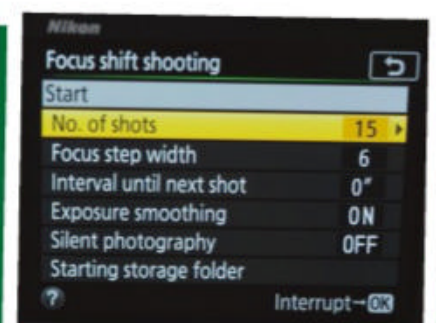
GET FOCUSED

It's best to use Live View. Zoom in to the closest part of the subject, and twist the focus ring until the detail is pin-sharp. Once you've achieved focus, take your first shot – it's best to use a remote shutter release, as at such close distances even the slightest knock of the camera will ruin the shot.

FOCUS SHIFT SHOOTING

With a focus shift mode like the one on the Nikon D850 you select the number of shots you want and the 'focus step width' – the amount by which the focus ring rotates. The

exact figures you'll need depends on a few factors, including the lens's focal length, how close the subject is, and your selected aperture, so it's a case of trial and error.



S K I L L S

STEP BY STEP STACKING FOR SHARPNESS



4

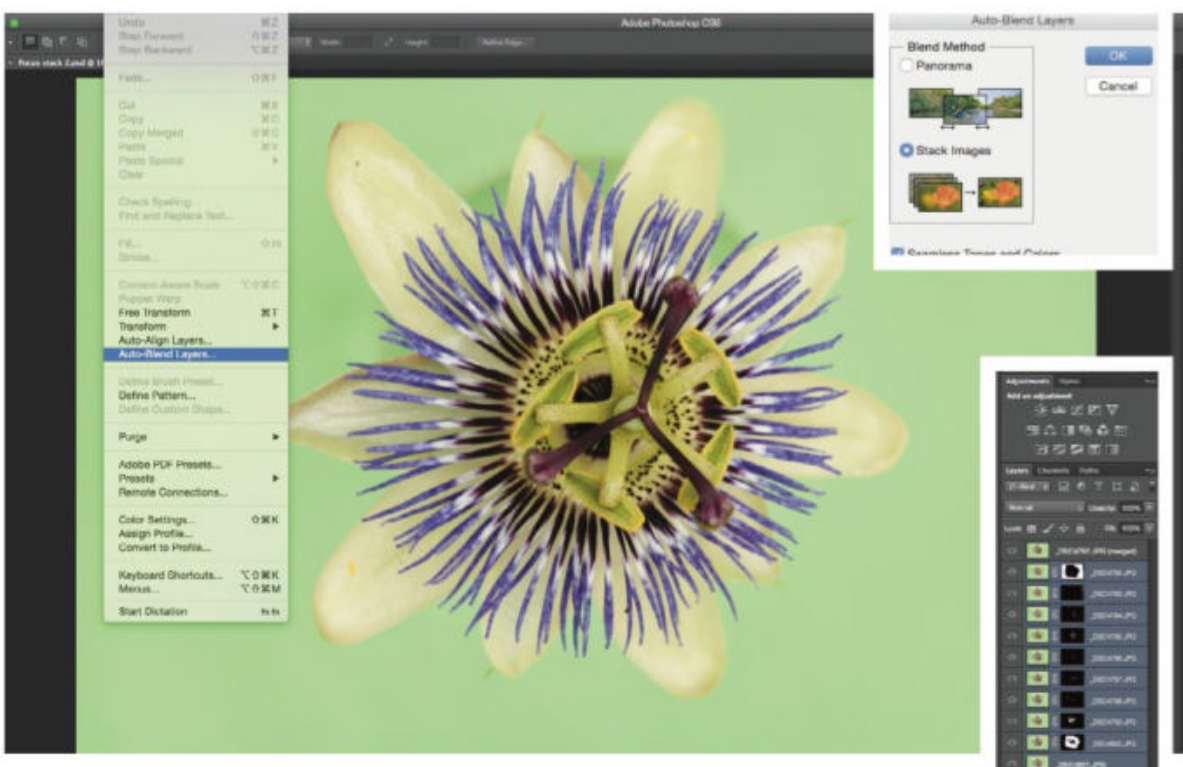
REFOCUS AND REPEAT

Rotate the focus ring a tiny fraction so that the plane of focus is a little further into your subject and take another shot, taking care not to jolt the camera in the process. Repeat until the very furthest part of the subject is in focus.

5

OPEN THE IMAGES

Once you've uploaded the images to your computer, open Photoshop and go to File > Scripts > Load Files into Stack. Click the Browse button, select your images and click Open, then OK. The images will be loaded into a Photoshop document as separate layers.



6

BLEND THE IMAGES

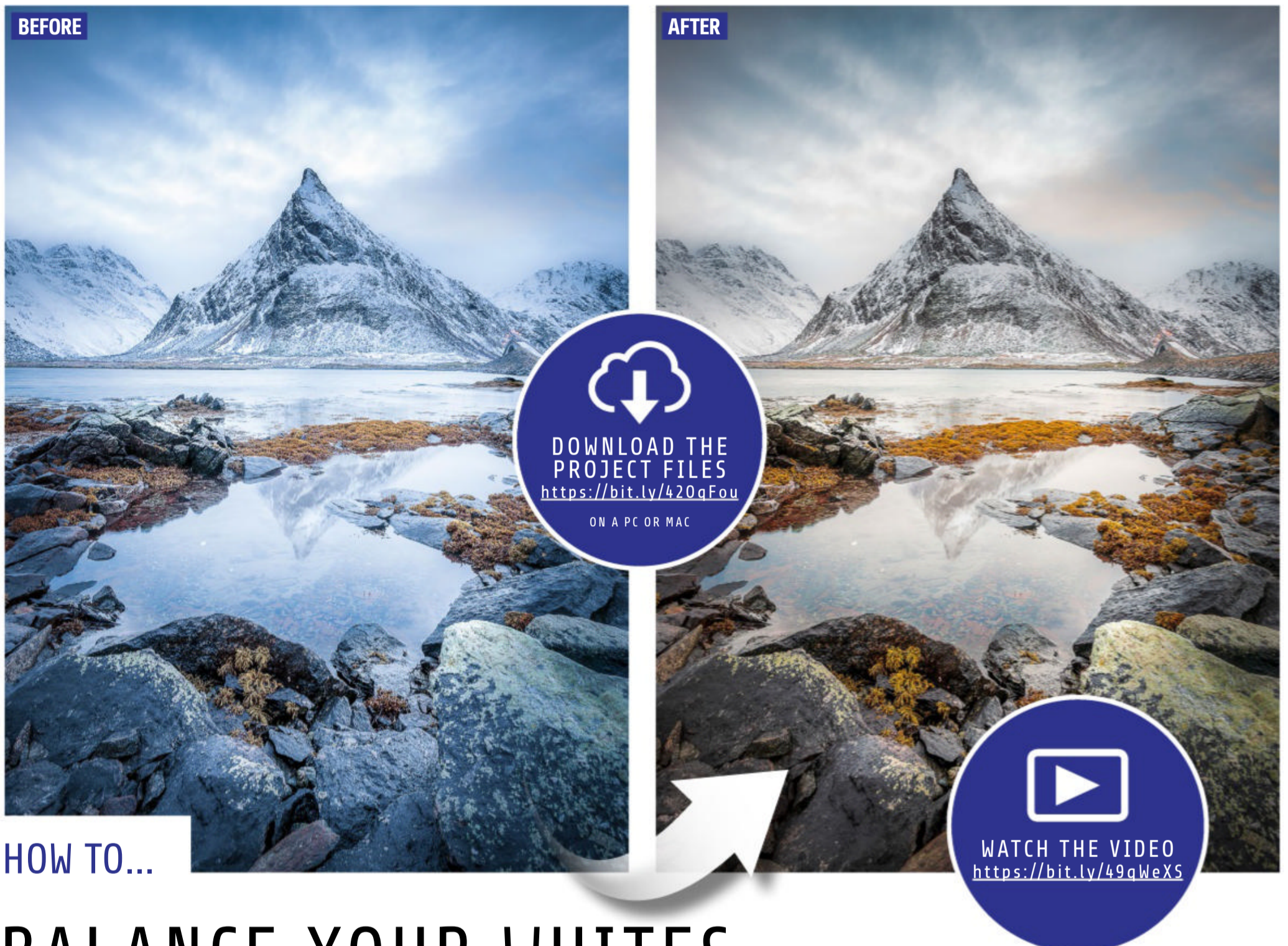
Select all the layers, then go to Edit > Auto Blend Layers. Set Blend Method to Stack Images, make sure Seamless Tones and Colours is ticked, then click OK. Photoshop will now magically combine the sharpest bits of each layer together using layer masks.

QUICK TIP

While Photoshop does a good job of focus stacking, specialist software does it better. Try Helicon Focus (<https://bit.ly/48z8btB>) or Zerene Stacker (<https://bit.ly/48rYCMZ>).

CAMERA RAW / LIGHTROOM

LEARN ESSENTIAL EDITING SKILLS FAST!



HOW TO...

BALANCE YOUR WHITES

James Paterson shows you how to apply colour shifts and fix casts in Camera Raw and Lightroom

There's more to white balance than simply getting the whites balanced – it's about getting every colour in an image right. There are two ways you can do this: set the white balance in-camera, or shoot in raw and set it afterwards. Best practice is to set it in-camera, but sometimes this isn't practical. By shooting in raw, you can leave your white balance set to Auto WB, safe in the knowledge that you can tweak it afterwards if necessary.

Photoshop's Camera Raw and Lightroom offer near-identical white

balance tools, which you'll find in the Basic panel in Camera Raw or in the Develop module in Lightroom. The tools are simple to use, but there are some essential tricks that can help you get the most out of them, which you'll learn in this issue's video tutorial.

One of the great things about white balance tools is that you can use them selectively in different areas of the photo. With a landscape like the one above, it means we can pull out a touch of warmth in the sky while also fixing the image's overall cool cast.

EXPERT TIP

Sometimes it can be tricky to determine the right white balance settings, especially if there isn't an obvious neutral area to sample with the Eyedropper Tool. If you're struggling, a handy trick is to temporarily take the Saturation and Vibrance sliders all the way to 100%. This can make it much easier to assess the balance of colours, and determine whether the image is too warm or cool (in which case, tweak Temperature) or too green or magenta (tweak Tint). Once you're happy, double-click the Saturation and Vibrance sliders to reset them.

G E A R

MEDIUM-FORMAT CAMERA TEST

EXPERT OPINION ON THE LATEST KIT



HASSELBLAD 907X & CFV 100C

A camera system that's not just beautiful but versatile, too

www.hasselblad.com [£6,729/\\$8,199](#)

The Hasselblad 907X and CFV 100C is quite simply the most beautiful camera system I've seen. I'm a sucker for vintage cameras and SLR-styled modern mirrorless models, but I've never been quite as smitten with the design of a camera as with this one.

This beauty is also a beast, however. A truly unique modular system, the Hasselblad 907X & CFV 100C comprises a 'camera' – the 907X – and the all-new 100MP medium-format back – the CFV 100C. Combined, they become a modern

mirrorless camera, but the CFV 100C can also be attached to a vintage Hasselblad body, such as the iconic 500C, adding 100MP horsepower to these similar systems.

The camera is a huge step up in performance over the previous Hasselblad 907X and CFV 50C (the older 50MP digital back). That's because, inside, it has a lot in common with the Hasselblad X2D 100C, namely the 100MP sensor and phase-detect autofocus system with face detection.

However, the X2D is a conventional SLR-style camera, so the 907X &

CFV 100C have as many differences as similarities. So who is this combo for, and does an old-fashioned box-style camera still have a place in the modern world?

Features

The most obvious feature of the camera is its jaw-dropping design – a palm-sized, perfectly sculpted square body that eschews a viewfinder and ergonomics in favour of a tilting screen and touch-oriented inputs. However, this is more than just an aesthetic affectation. This is a modular



G E A R

MEDIUM-FORMAT CAMERA TEST HASSELBLAD 907X & CFV 100C



1 The most obvious feature of the camera is its jaw-dropping design – a perfectly sculpted square body.

2 The CFV 100C instantly transforms an old 200 or 500 camera into a 100MP mirrorless powerhouse.

3 From the tactility of the exposure dial to the shutter button, the whole system is a marvel of precision.

4 An optional optical viewfinder can be attached, though the system is intended to be used via the screen.

5 The shutter is located in the bottom corner, where your finger sits as you hold the camera in hand.

6 The 3.2-inch rear screen's 2.36 million dots and 24-bit colour show off the glorious colour depth and tonality of its images.

7 There are five buttons at the bottom of the screen, but the system is designed to be driven by touch.



The 100MP resolution offers so much flexibility in terms of editorial framing, shooting in different aspect ratios, and the ability to artificially extend focal length

camera system that consists of two parts: the wafer-thin 907X 'camera' (a mount adaptor to attach XCD lenses to the camera back) and the CFV 100C digital back, which contains the 100MP image sensor, processor, rear screen, controls, battery and memory. Inside the CFV 100C is the same 100MP sensor and phase-

detect-powered autofocus system as the Hasselblad X2D. The new 907X combo delivers the same performance as the X2D, but with additional versatility due to the modularity of the system. With the CFV 100C and 907X, you can mount the modern mirrorless X System Hasselblad lenses (along with HC/



G E A R

MEDIUM-FORMAT CAMERA TEST HASSELBLAD 907X & CFV 100C



© James Artaius



© James Artaius

The 907X/100C has no stabilisation; however, if your work demands a more measured approach, such as product photography, then this is less of a disadvantage



© James Artaius

The incredible 100MP sensor produces pin-sharp images, but this resolution will instantly betray even the merest hint of laxness in your camera discipline

HCD, V and XPan glass via adapters). However, you can also attach the CFV 100C to technical cameras and Hasselblad's legacy V System film medium-format cameras, including

the 500 and 200 series.

Like the X2D, this system has a single CFexpress Type B slot (which supports cards up to 512GB) along with a built-in 1TB SSD, good for

around 4,700 raws, 4,000 raw + JPEG sets, 28,000 JPEGs, 4,300 raw + HEIF sets, or 53,000 HEIFs. Thanks to their leaf shutter design, Hasselblad XCD lenses support flash synchronisation at all shutter speeds, which is handy for the studio shooting that this system caters for. A feature you won't find, however, is video; no one buys a Hasselblad because they want to shoot a vlog, but it's worth mentioning.

Build and handling

The build quality of the 907X/100C is as premium as the design. From the locking mechanism that connects the body and the back, to the irresistible tactility of the exposure dial and shutter button, the system is a marvel of precision. While there are five buttons at the bottom of the rear screen, the camera is designed to



The images are sublime, as always from Hasselblad. As well as tonality and colour, there's so much richness and depth packed into the files, and the highlights and shadows sing



© James Artaus

“THE CAMERA’S MOST OBVIOUS FEATURE IS ITS JAW-DROPPING DESIGN – A PALM-SIZED, PERFECTLY SCULPTED SQUARE BODY”

be driven by touch – and Hasselblad’s menu system and touch interface are unparalleled. Like a minimalist, upmarket version of Apple’s UX, this is the most luxurious way of changing ISO or adjusting your screen brightness. The rear screen is a 3.2-inch affair with 2.36 million dots and 24-bit colour to display the glorious colour depth and tonality of images.

Given that the combo is designed to be used like a classic top-down

camera with a waist-level ‘finder, such as the Hasselblad 500C, the touchscreen tilts, with hard stops at 40 degrees and 90 degrees. An optional optical viewfinder can be attached, though the system is intended to be used via the screen.

The ergonomics are modelled after classic medium-format ‘box’ cameras – which is to say, this isn’t a camera designed for handheld shooting, though it fits in the palm. The shutter is located in the bottom corner,

where your trigger finger sits as you hold the camera in your hand, and is surrounded by the knurled exposure dial. These are the only direct controls on the camera itself, though XCD lenses have a customisable control ring to add an extra exposure function.

A beautiful-looking grip is available for dedicated handheld shooting. But while the grip feels great and works well, this camera is to made be used on a tripod rather than handheld – particularly since it lacks any in-body image stabilisation. Besides, that 100MP resolution will instantly betray even the merest hint of laxness in your camera discipline.

Performance

The 907X with CFV 100C delivers genuinely incredible image quality, with unrivalled tonality and colour



© James Artaius



The 907X & 100C demands a considered approach rather than rapid-fire SLR-style shooting. As such, it's tailor-made for landscapes, still life, product photography and studio portraiture

depth. Hasselblad's Natural Colour Solution technology means that hues and tones 'pop' in a way that adds greater dimension to your subjects. Of course, this being the same sensor that's found in the Hasselblad X2D, you can expect the same 16-bit colour and 15 stops of dynamic range – along with the same phase-detect autofocus system that finds focus fast and reliably.

While the camera's sensor and AF system are carried over from the X2D, something that hasn't been transplanted is the seven-stop image stabilisation system. The modern Hasselblad demands a deliberate,

S P E C S

SENSOR: 100MP BACK-SIDE ILLUMINATED CMOS MEDIUM-FORMAT **LENS MOUNT:** HASSELBLAD X SYSTEM **AUTOFOCUS:** HYBRID PHASE DETECT WITH 294 PDAF ZONES **IMAGE STABILISATION:** NO **ISO RANGE:** 64 TO 25,600 **VIDEO:** NO **VIEWFINDER:** NO **LCD:** 3.2-INCH, 2.36 MILLION-DOT TILTING (40°, 90°) TOUCHSCREEN **MEMORY:** INTERNAL 1TB SSD, 1X CFEXPRESS TYPE B (UP TO 512GB) **MAX BURST:** 3.3FPS (14-BIT COLOUR) **CONNECTIVITY:** WI-FI 6, BLUETOOTH, USB-C 3.1 GEN2, SHUTTER CONTROL PORT, FLASH SYNC INPUT, FLASH SYNC OUTPUT, ELX OUTPUT, OPTIONAL HOT SHOE **SIZE:** 102 X 92 X 84MM **WEIGHT:** 620G (907X & CFV 100C ; EXCLUDING BATTERY AND MEMORY CARD)

“HUES AND TONES ‘POP’ IN A WAY THAT ADDS GREATER DIMENSION TO YOUR SUBJECTS”

considered approach rather than rapid-fire SLR-style shooting. As such, the 907X / 100C is tailor-made for landscapes, still life, product photography, studio portraiture, and any situation where the camera can be set up stationary for measured, precise work. That said, it's also a formidable street shooter when paired with a monopod.

Image quality, as always from a Hasselblad camera, is sublime. In addition to the tonality and colour, there's so much richness and depth packed into the files that highlights and shadows simply sing, and there's also latitude in the dynamic range to work with. Then there's the resolution; it's easy to forget how much flexibility 100MP gives you, and not just in terms of framing, or being able to shoot in aspect ratios like XPan (65:24), but also in the ability to artificially extend your focal length.

James Artaius

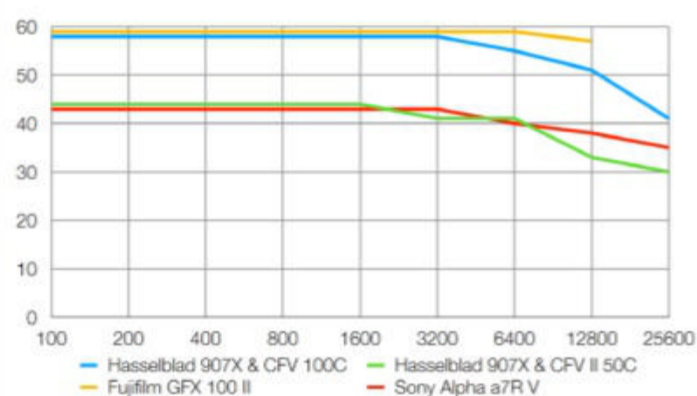
VERDICT

The Hasselblad 907X & CFV 100C is a truly unique camera system with a miraculous 100MP sensor; but, given its various limitations – lack of viewfinder, ergonomics or stabilisation – why would anyone pick the 907X & CFV 100C over the Hasselblad X2D? If your work requires the use of a tripod, then these limitations don't matter so much, and while there's no escaping the fact that it costs an incredible amount of money, the Hasselblad 907X & CFV 100C is the ultimate medium-format camera. If your work is studio or tripod-based, this is the system for you.



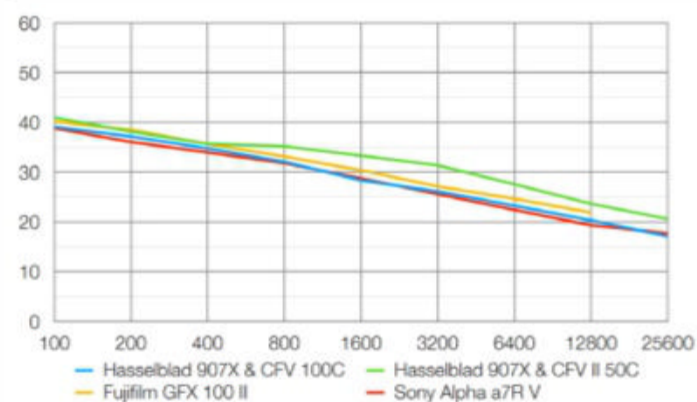
LAB TESTS

RESOLUTION (LINE WIDTHS/PICTURE HEIGHT)



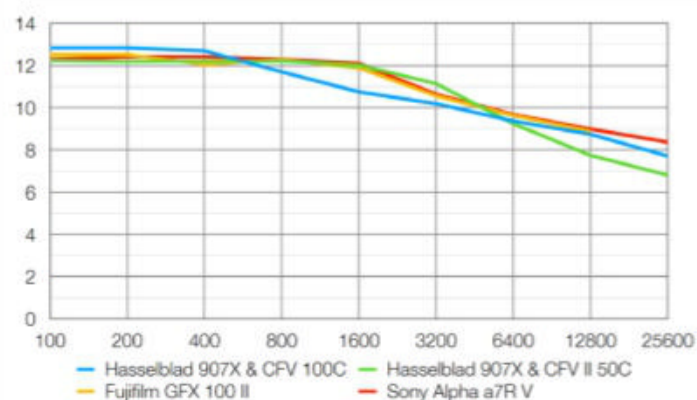
We tested the 907X / 100C against the Hasselblad 907X / CFV II 50C, Fujifilm GFX 100 II and Sony A7R V. The two 100MP cameras unsurprisingly resolve almost identical detail levels, though the GFX 100 II produces clearer results at higher ISOs, thanks to its slightly better image noise control.

SIGNAL-TO-NOISE RATIO (DECIBELS)

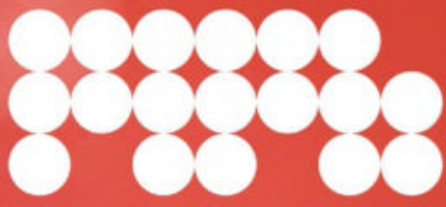


The camera to beat here is the CFV II 50C, as its relatively modest pixel count for such a large sensor area means it has larger individual pixels, which are, therefore, less susceptible to generating image noise.

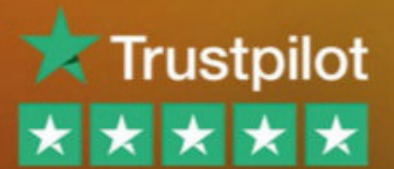
DYNAMIC RANGE (EV)



The CFV 100C leads the pack for dynamic range at low ISOs, but can't quite match the comparison cameras once sensitivities exceed ISO400.



mpb.com



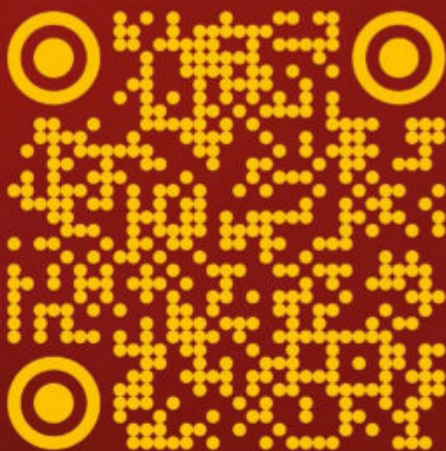
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