

NPhoto

100% UNOFFICIAL

Issue 160 • March 2024
www.digitalcameraworld.com

THE NIKON MAGAZINE

EXPERT ADVICE!

Cracking coastlines!

How to shoot the ever-changing landscape where land meets sea



Need for speed
Set your shutter to freeze action – or blur creatively



BIG TEST!

Perfect for portraits
Capture your subject's best side with these fast short-tele primes

PHOTO PROJECTS
6 INSPIRATIONAL IDEAS TO TRY AT HOME TODAY!

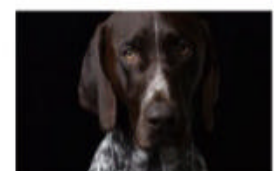
NikonSkills

PRO TIPS!

Food, glorious food
Our apprentice learns to take scrummy shots that look good enough to eat



Clive Mason
"There's nothing nicer than a prime lens" **p60**



Cover star!
How the apprentice has become the master **p84**



A closer look
Just how good are Z teleconverters? **p94**





mpb.com



Don't sit on it. **Sell it.**



More than half of us have camera gear we no longer use.

Sell your gear and upgrade your visual storytelling.

Trade up for new adventures.

Upgrade, completed.



Do you have unused camera gear? MPB is the largest global platform to buy, sell and trade used gear.

Get an instant quote



Buy • Sell • Trade
Create ●

See mpb.com/info/unused-tech-survey for more details.

NPhoto

This issue's special contributors...



Emma Dunham

PAGE 6

Foodie photographer Emma shows this issue's apprentice how to take salivating shots of mouth-watering morsels.



Ross Hoddinott

PAGE 26

Being based a mere stone's throw from the Cornish coastline, Ross is ideally placed for our seaside landscape feature.



Paul Wilkinson

PAGE 38

How are the New Year's resolutions going so far? Paul hasn't broken his yet, because he refused to make any.



Clive Mason

PAGE 60

Getty Images pro Clive tells how tinkering with his dad's DSLR led to him becoming one of the top sports 'togs in the business.



Jamie Smart

PAGE 68

The youngest-ever winner of the RSPCA Young Photographer Awards shares the story behind her astounding wildlife images.



Marie Ainge

PAGE 84

One-time *N-Photo* apprentice Marie reports on how her pet and people portrait photography is coming along.

Go coastal with Ross Hoddinott and learn to take your best-ever images of the shore. See page 26.



Image: © Ross Hoddinott

Welcome to issue 160



While it might not quite be sunbathing weather just yet, the lure of the coast is an all-year-round attraction to photographers. But with the constantly changing tides to account for, there's more to worry about than with a regular landscape shoot, so in this issue's lead feature Ross Hoddinott presents his top tips for capturing sensational shots of the seashore.

Of course, this time of year is a very good time to stay inside, too, and food photographer Emma Dunham shares the tricks of the trade with her apprentice for the day, teaching her to capture tantalizing images of tasty treats including delicious desserts, ultra-pink shakes and stacks of syrup-drenched pancakes. Mmmm, pancakes...

We put a range of short-telephoto primes that are ideal for portraiture through their paces, with focal lengths between 85mm and 135mm. The Voigtlander 15mm f/4.5 wide prime gets the review treatment. We also test Nikon's claim that its Z-series teleconverters have no material effect on image quality. Can it really be true?

We'll show you how to capture caves, get reflective shots of wildlife, be creative with cross-polarization and photograph a mermaid, too!

Adam Waring, Editor

adam.waring@futurenet.com

SUBSCRIBE TO N-PHOTO & GET A FREE LOWEPRO CAMERA BAG!

Take out a six-issue sub to **N-Photo** and get a LowePro Passport Duo worth £29.99! **SEE PAGE 24**



Contents



WIN! A NIKON Zf
SEE PAGE 81



Cracking coastlines! **26**
Head for the beaches, bays, cliffs and quaysides to capture the ever-changing landscape that never stays still



38 Portrait professional Paul Wilkinson is *always* up for setting new challenges



68
Meet the winner of the RSPCA Young Photographer Awards

06 Apprentice Learn how to photograph edibles with foodie pro Emma Dunham

16 Lightbox Take a closer look at these winners from the Close-up POTY comp

26 Cracking coastlines! Tips to tide you over till your next seaside shoot...

38 Go Pro Paul's New Year's resolution was to avoid New Year's resolutions

41 Nikon Skills How to photograph a mermaid, amongst other projects

60 Interview Sports photographer Clive Mason speaks about his stunning career

68 On Assignment Eight-year-old Jamie Smart shares her amazing wildlife shots

70 Nikopedia Shutter speed explained, and your questions answered

76 N-Photo POTY Winning shots in the still life round of our photo challenge

82 Letters We love to hear what you have to say, so don't be shy, write to us today...

84 Your Stories Reader Marie Ainge's pics of her two and four-legged friends

88 The Photography Show What we're looking forward to in Birmingham

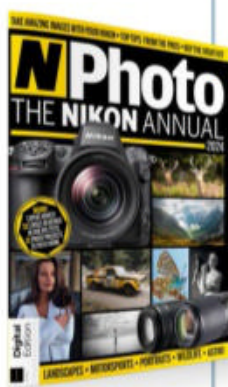
90 Next issue Just wait till you see what we have in store for *N-Photo* issue 161

107 Back issues Missed a copy? Right that wrong before it's too late

114 Parting Shot Prefer not to edit? That's just an excuse, insists Mike...

Free! N-Photo: The Nikon Annual 2024

Download your free ebook edition of our lovingly collated annual, packed with the very best bits of *N-Photo* magazine from the past year, including inspiring features, fun projects and invaluable kit reviews. Get yours from <https://bit.ly/npann24>



SUBSCRIBE!

Massive subscription savings!
Plus a free Lowepro Passport Duo bag!

SEE PAGE **24**

WORTH **£29.99**



NikonSkills

Master your Nikon today!



42 Delve a little deeper
Capture the claustrophobia of caving

44 A time for reflection
Get twice as much into your nature shots



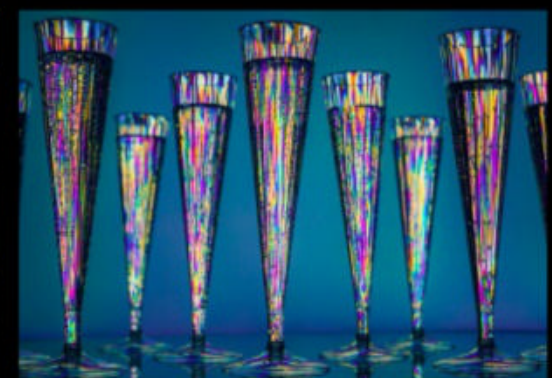
48 A little bit fishy
Tips for shooting fantasy portraits



50 The long-exposure look
Stack shots in Affinity Photo to fake blur



52 Heal in Lightroom and ACR
Tidy up images *without* Photoshop



54 Creative cross polarization
Create spellbinding abstracts with a filter



06

The best thing about food photography is you get to eat it afterwards...



60

Top Getty Images 'trog Clive Mason speaks with N-Photo



Gear Zone

92 Voigtlander 15mm f/4.5 Manual-focus wide prime for Z-series Nikons rated

94 Nikon TC-1.4x & TC 2.0x Just how good are these Z-series teleconverters?

96 Portrait primes Eight super-sharp, fast prime lenses, from 85mm to 135mm

108 Buyer's Guide Your at-a-glance guide to Nikon cameras and compatible lenses



Whenever you see this logo you'll know there's an accompanying video that you can **watch online**.

The videos and information provided are 100% independent and not endorsed or sponsored by Nikon Corporation or Adobe Systems Incorporated

NPhoto APPRENTICE



THE PRO

NAME: **Emma Dunham**

CAMERA: **Nikon D810**

Emma left sales and marketing over 16 years ago to become a pro commercial portrait photographer, but it wasn't her passion. When lockdown hit, it became the incentive she needed to pursue a different avenue. So, she enrolled in Jeff Brown's mentoring program and dived into the world of food photography. A few years later and she runs a thriving 'foodie' business and has won multiple awards. To find out about her workshops and more, visit: www.emmadunham.co.uk

THE APPRENTICE

NAME: **Tania Delohery-Duffy**

CAMERA: **Nikon D850**

Tania was always the family's designated photographer, but when she bought her partner a bridge camera – which sat on the shelf – she decided to tinker around with it. Before long, she was photographing her partner and his children doing motocross. When the track owner invited her to step behind the barrier, she donned the high-vis and has done so ever since. Today, she's excited to try something a little less muddy! See her work: www.reminiscentimagery.com



Tuck shots

Pro 'foodie' **Emma Dunham** spoon-feeds our apprentice her tastiest trade secrets

W

hen Tania arrived at Emma's home studio, gorgeous morning light was filtering through the windows, and the pro was busy adding berries to a delicious-looking Italian 'pandoro' cake. The apprentice admitted that she was both

excited and a little nervous to be trying food photography for the very first time. But Emma soon made her feel right at home.

"I'm probably not very grown up," said the pro. "Food is fun, food is joy, food is a celebration, and I want to show food in its best light." As Emma finished preparing the



SUPER
SHOT #1

Camera:	Nikon D850
Lens:	24-70mm f/2.8
Exposure:	1/800 sec, f/3.5, ISO250

EXPERT INSIGHT FOOD PHOTOGRAPHY TIDBITS

Emma says... Every shoot is different and I'm often required to come up with creative solutions to work around various problems. Over the years, I've come up with a few tried-and-tested tips that I come back to again and again. Here are some of my favourites.

Cocktail sticks are an effective way to keep items of food securely in place; I used them to attach the fruit to the pandoro. A spirit level is helpful when trying to shoot a flatlay square on. A lens brush comes in handy removing crumbs. Incense provides a continuous source of 'steam'. Use a blow torch to brown pizzas evenly. And finally, place a small pinch bowl upside down in a larger bowl, before adding food items. This will decrease the volume of the bowl and lead to less wastage.



Emma uses a tea strainer to douse the pandoro with an even and fine dusting of icing sugar.



TECHNIQUE ASSESSMENT

1



FIRST PORT OF CALL

Emma says... I like to shoot tethered via Adobe Lightroom. Being able to see the images as you're taking them, while zooming in to check critical sharpness, is really helpful. Yes, it can be a bit temperamental and slow, but it's extremely useful in a studio setting, especially if you're working with clients.

pandoro, they discussed the itinerary for the day. "I wanted to provide as much variety as possible, so I've got three sweet and two savoury setups."

"That sounds like a lot," said Tania.

"It is, but you often have to work quickly. If you're on a commercial shoot, you'll have multiple dishes to photograph, and as you'll find later, some foods have to be photographed instantly before they spoil.

"Ultimately, there are three angles when shooting food photography: 45 degrees, eye level and flatlay. That's it, so by the end of today we'll have tried all three."

"Do you make all the food yourself, or do you buy some in?" asked Tania.

"I bought this pandoro. I do make some dishes from scratch, but I find that if I've shopped for the ingredients, prepared and cooked it, I'm itching to take the photo and be done with it. The best solution, for me, is to buy something and dress it. For some shoots, I also work with a food stylist."

PANDORO'S BOX

"This will be the hardest shot of the day," said Emma as she carefully transferred the pandoro onto a cake stand next to the window. "Let's make use of this beautiful natural light, while we can. I used to light everything artificially. When I was pushed to work with natural light, it opened up a whole new world of possibilities. I still use studio lighting when needed, but ambient light makes up the majority of my work."

Once Tania had set up her Nikon D850 and 24-70mm f/2.8 on a tripod, Emma attached a tethering cable. "This allows us to see the image on a laptop screen, rather than straining to look at the camera's LCD. It also acts as a remote shutter release, so we're in no danger of jogging the camera."

PRO KIT MOD THE LIGHT

Emma says... Working with natural light doesn't mean you forgo all control. I use a net curtain to diffuse window light and various sizes and intensities of reflector, to bounce light back onto my subject and subtly fill in the shadows. If you don't want to buy a dedicated reflector, you can always use a sheet of white card or tinfoil.



The next step was to put together the arrangement. "I came up with the idea for this in the middle of the night," said Emma. "An Italian family, enjoying a pandoro. It's not pristine, it's rustic." The pro pulled a net curtain across the window to diffuse the light and the pair discussed what props they would add to the arrangement. →

2



FOODIE BLUES

Emma says... I like to set my white balance manually to around 5600 K and cool it down further from there. The temptation is to warm your images like a face, but this can make the food look sickly. Always shoot Raw too, so if your colour temperature is off, you can change it in post-production.

3

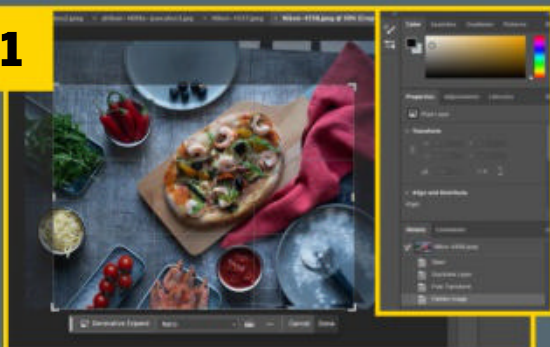


WHAT'S ON THE MENU?

Emma says... I shoot in Manual mode and often find my aperture around f/5.6. Despite shooting on a tripod, I do like to keep my shutter speed relatively fast to absolutely avoid camera shake. While we know to keep our ISO low, Nikons have become so adept in low light you can often push your ISO a bit.

HOW TO: EDIT FOODIE SHOTS

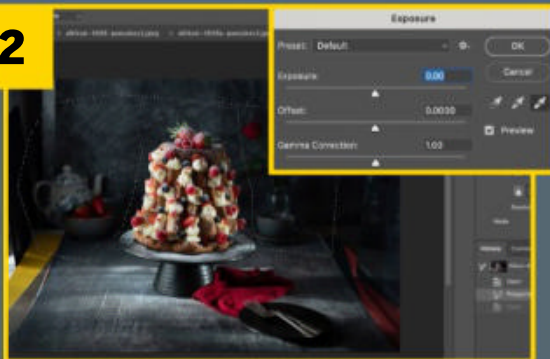
1



THE CROPPING BOARD

Emma says... When there are lots of extra props in an image, you risk detracting from the main subject. A clever crop can remove distractions and create a stronger overall composition that ultimately guides the viewer's eye towards the hero item and helps it to shine through.

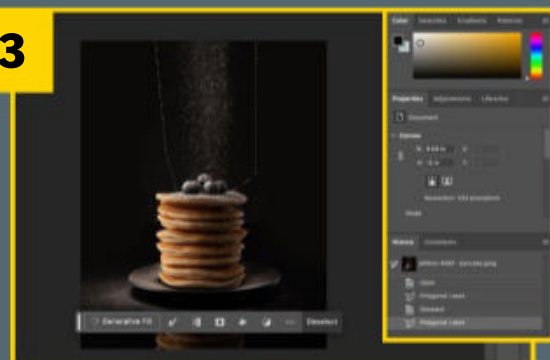
2



PARE DOWN THE PROPS

Emma says... In the background of this shot the props are too light, causing the viewer's eyes to be drawn to them, especially the teapot as it's white. I used the Polygonal Lasso Tool to cut around the props in the background and selected Image > Adjustment > Exposure to drop the exposure.

3



SUGAR AND SYRUP

Emma says... I felt the pancake images with just the icing sugar or just the syrup looked a little sparse, so using the Polygonal Lasso Tool, I cut around the icing sugar in one image and added it to the image with the syrup to add extra interest.



A small blowtorch is a handy tool if you want to evenly brown a food item like a pizza, something that can be difficult to achieve in the oven.

"The blueberries pair nicely with the cool backdrop and surface, but I'd like some red objects to complement the red berries." She rummaged around in various boxes and produced a red cloth and roses, before filling a bowl with leftover berries.

"Where do you get your backdrops from?" asked Tania.

"Most of them are professional ones that companies have given me to try out. Others I made myself. I'll often buy textured wallpaper, which works well. People think you need one large continuous piece of paper for the backdrop and surface, but it's nice to separate them to replicate a table aesthetic."

The roses and bowl of fruits were placed behind the pandoro to provide interest, while the red cloth was placed in the foreground, adding a little texture.

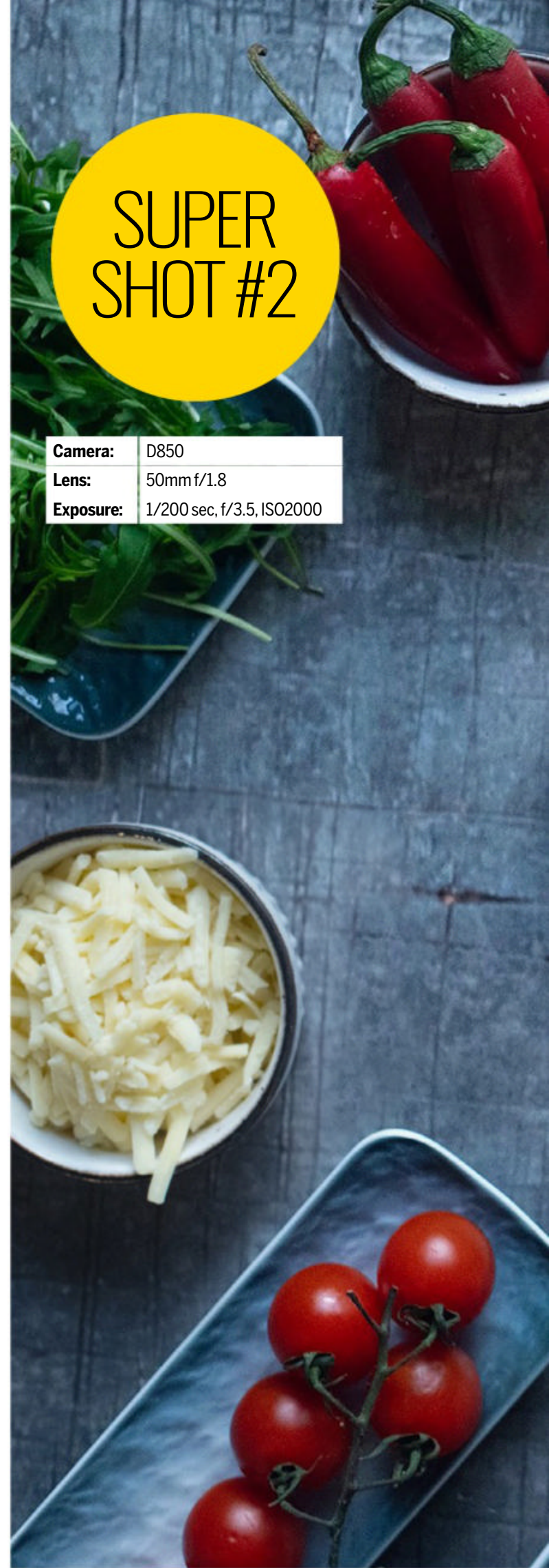
"There are two ways I light food, sidelit or backlit," said Emma. "If you light something from above, you'll lose the shadow, which looks artificial. We know the pandoro is getting lit from your left, Tania," The pro swivelled the cake stand, "so let's make sure its best side is illuminated."

She then placed a reflector beside the cake. "That's looking good," she said as she pointed to the laptop screen, "but notice how the cream is blown out?"

Tania reduced her ISO by a stop to even the exposure. The setup was looking good, so they moved onto focusing. "I use single-point AF and will focus on the subject. But a good tip is to work your way around the entire product, focusing on different planes, so you end up with about 20 shots. This is key. If you're working on an image in post and you realize it's not sharp enough, you can always focus stack

SUPER SHOT #2

Camera:	D850
Lens:	50mm f/1.8
Exposure:	1/200 sec, f/3.5, ISO2000



it. Remember, you can work on light in post, but a blurry image is a blurry image."

The final touch was a dusting of icing sugar. "You may find the exposure looks a little brighter when we add the icing sugar." Emma used a tea strainer to ensure the dusting was light and accurate. Super Shot #1 was ready for the oven.

A MATTER OF FLAT

Emma's next setup was a flatlay. She began by placing down a large textured surface directly in front of the open studio door so it was backlit, before adding a



wooden paddle in the centre, which would house the pizza – currently in the oven – and various bowls and trays around it.

“The idea is to have the pizza in the centre, surrounded by the raw ingredients,” she said as she began to carefully arrange a tray of whole prawns. A red cloth was once again placed in the scene to provide texture: “You can either fold a napkin or scrunch it up for a more rustic aesthetic, it’s genuinely called napkinology,” she said with a smile.

Tania then enlisted Emma’s tripod, since her own one didn’t have an articulating →

EXPERT INSIGHT A DISHY LOOKING FISHY

Emma says... Food photography is about making your subject look as appetizing as possible. When buying produce, make sure you take the time to select a photogenic specimen. When I picked up this mackerel from a supermarket fish counter, I asked the fishmonger if he could find the most beautiful-looking mackerel available. I explained it was for a food photo shoot and he took extra care to find the perfect specimen.





A window and a reflector is as good a lighting setup as any, when it comes to food, and costs next to nothing.



PRO KIT PRIME CUTS

Emma says... I work with prime lenses: the Nikon AF-S 85mm f/1.8G, 50mm f/1.8G and VR Micro 105mm f/2.8G IF-ED. I'm working in a controlled environment, so I don't have to worry about changing my focal length quickly via a zoom lens, so I select lenses that I know are going to be fast and sharp. Primes tend to be smaller too, which helps when balancing on a tripod.

centre column, essential for setting the camera directly above the flatlay. "We'll use my little 50mm prime for this one," said Emma. "Because suspending the camera on the end of the centre column makes it top heavy. Even then, we'll hang this from the tripod as a counterweight," she held up a weighted bag.

"You need to get your camera square on. I use this spirit level to get it in the right ballpark, but trust your eye. If it seems off, the floor or tray may be slightly uneven."

Once the pizza was ready, Emma carefully slid it onto the paddle. "It's a little undercooked. I don't like to brown it in the oven, because it'll be uneven. Instead, I use this blowtorch." The pro carefully singed the pizza topping and, once happy, they turned their attention to Tania's settings.

Emma advised to keep the shutter speed around 1/200 sec to prevent any camera shake from the precarious tripod setup. Tania was then able to widen her aperture to f/3.5, which yielded ISO2000.

"That'll work," said Emma, as she carefully adjusted a bowl of cheese. "There's hardly any depth, so even at f/3.5, everything will look sharp and your D850 is good enough to handle ISO2000."

Super Shot #2 – sautéed to perfection!

CAMERA SHAKES

The next setup was themed around a 12-year-old girl's birthday party. Emma moved a pink background into place and a couple of white wooden slats to create a table surface. "We'll have to work quickly on this one," she said. "We've got diminishing natural light outside and, as you'll see, the milkshakes are prone to separating as soon as you add the cream."

The pair placed a couple of empty

milkshake glasses into the scene and scattered a variety of additional props around them, including bright pink fondant fancies, bonbons, roses and ring biscuits.

Tania reduced her ISO to 800, but kept the same camera settings they'd used for the flatlay. "That's looking good," said Emma, "we want the viewer to be drawn to the milkshake in the foreground, so the shallow depth of field works well."

Emma disappeared for a moment and returned with a large jug of pink liquid. "Don't get too excited," she said. "It's just milk with food colouring in it." As she filled up the two glasses she took care not to spill any liquid down the sides of the glasses.

Once the milkshake was in situ, they

reviewed the image. Emma decided to add a reflector to bounce light back onto the glasses. Both photographers were happy that the camera and lighting was ready to go. The final touch would be squirty cream, sprinkles and a pair of classic straws.

Emma expertly applied the cream, but when she added the sprinkles, she was much more liberal. "A few straws add →

EXPERT INSIGHT MAKING ARRANGEMENTS

Emma says... Emotion is an inherent part of genres such as wedding photography and maternity photography, but that isn't always the case with food. My goal is to inject emotion into every image. That begins

with the concept and then the arrangement. Take the milkshake setup, for example. I wanted to create a pink, party vibe that evoked a sense of childhood nostalgia. I tend to avoid using anything like glycerine to enhance my

subjects, because I want them to look as real as possible. With some setups, you do have to work quickly though, like these milkshakes. Once the 'squirty cream' was added, the liquid separated in seconds.



SUPER
SHOT #3

Camera:	Nikon D850
Lens:	24-70mm f/2.8
Exposure:	1/200 sec, f/3.5, ISO800



SUPER
SHOT #4

Camera:	Nikon D850
Lens:	24-70mm f/2.8
Exposure:	1/200 sec, f/13, ISO200





PRO PORTFOLIO EMMA DUNHAM



Emma's studio setup consisted of an Elinchrom EL250 with an Octabox and a D-Lite with a snood.

to the aesthetic," she said, before placing the two straws so they leaned the same way and didn't cause the cream to topple.

Tania fired a burst and within seconds the milkshakes had separated. Thankfully, Super Shot #3 was ready for the chiller.

FOCUS STACKS

The natural light had faded, so their attention turned to Emma's studio setup. "We're going to mimic natural light with a side light, while directing a snood from behind to backlight the opposite side."

The subject of choice was a stack of pancakes, positioned on a sheet of black acrylic to produce a reflection. Emma took the time to select identical pancakes to produce the perfect stack. She then directed Tania to set up her tripod at eye-level and input a shutter speed of 1/200 sec, since they were using flash.

Tania took a test shot, but the exposure was too bright. She narrowed the aperture to f/13, while Emma turned the key light's power down. "I like the darker feel," said the pro. When they reviewed the laptop screen, they noticed a pancake with a chunk missing, so it was carefully replaced.

Knowing Tania's settings were set, Emma added a few blueberries. "Right, I'm going to start drizzling maple syrup over the pancakes, so keep shooting. Just be aware of the flash head's recycle time, you can't shoot too fast." Tania nodded and as soon as Emma gave the cue, began to photograph the syrup. Once finished, they repeated the process with a smattering of icing sugar. "Excellent, we can blend the two together in post," said the pro as she

gathered a few plates and some forks. "That pandoro isn't going to eat itself..."



TANIA'S COMMENT

I had a fantastic day. Emma took me through every conceivable angle and lighting setup, and I simply cannot wait to take what I've learned home.



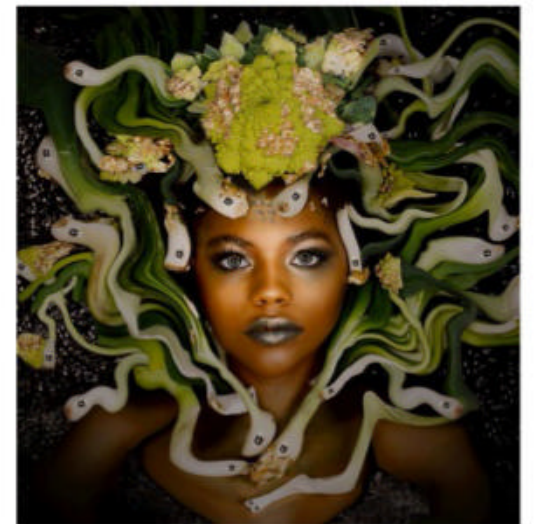
EMMA'S VERDICT

I think Tania's learned that food photography doesn't need to be complicated or expensive. It sounds like she can't wait to get creative at home! **N**

Emma's step-by-step guide to making drool-worthy food images is on the Shoot to Inspire Stage at the Photography & Video Show (NEC, 3pm, Monday 18 March).

BE OUR NEXT APPRENTICE!

We're looking for future apprentices to accompany *N-Photo* on exciting adventures! So, if you would like to appear on these pages and get top one-to-one professional tuition thrown into the bargain, fill out our Apprentice form at: <https://bit.ly/npapprentice> Please fill out the form in its entirety and be as detailed as possible with your answers. Fingers crossed; the next *N-Photo* apprentice could be you!



MEDUSA

Make-up artist Zoe Tiley and I laid the model on the floor and pinned baby leeks and spring onions into her hair. We used a romanesco to hide the crown. I then shot and added in black-eyed peas as the snake eyes. I twisted the spring onions and leeks in post to resemble snakes.



LOTUS BISCUIT CAKE

I let window light stream in from one side to create a natural shadowy aesthetic. No reflector was used, so I could retain the dark shadow on the right. A flag directed the light so it only fell on the cake's left-hand side and the biscuits on top.



ZOMBIE EGGS

These hard-boiled eggs were a Halloween setup. I cut right into the yolk to make eyes and a mouth. I then placed them on a sheet of acrylic and used a smoke machine to create a floaty, eerie illusion. They were lit using natural light.

LIGHTBOX

Our favourite Nikon images taken from the Close-up Photographer of the Year competition

The Wedding Guest

CSABA DARÓCZI

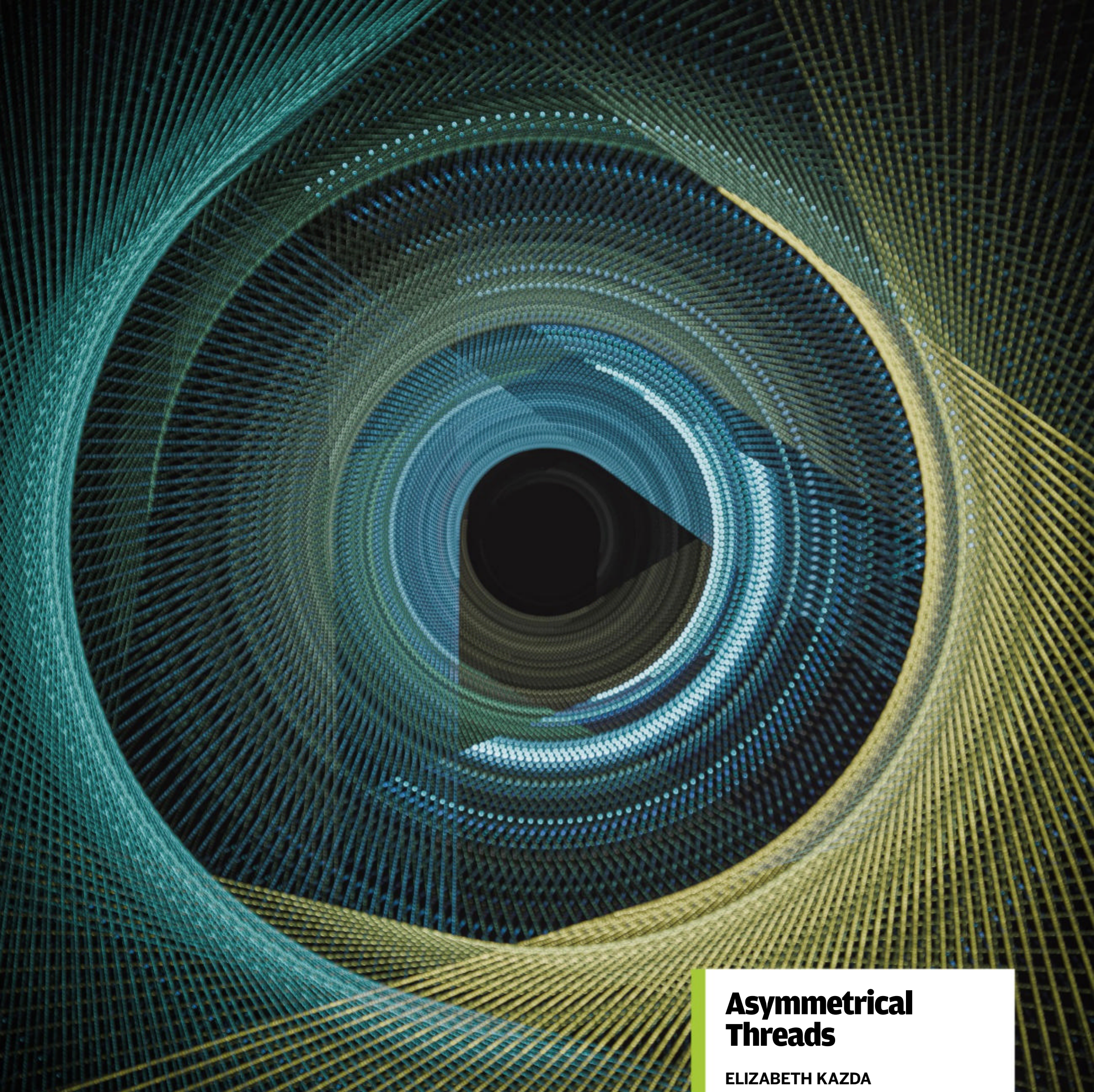
Butterflies & Dragonflies 1st Place

I was photographing a wedding in a forest clearing in the beautiful surroundings of Uzsa, Hungary. The hall lights attracted a lot of insects to rest on the windows. At one point, I saw some guests taking pictures with their phones next to one of the red lights.

As I moved closer, I noticed that an oak peacock moth (*Antheraea yamamai*) had taken up residence on the window. I waited until everyone had finished their pictures, and then it was my turn.

Camera:	Nikon Z 6
Lens:	Nikon AF-S 24mm f/1.4G ED
Exposure:	1/320 sec, f/1.4, ISO3200





© Elizabeth Kazda / cupoty.com

Asymmetrical Threads

ELIZABETH KAZDA

Human Made 1st Place

I wanted to photograph this thread in a unique way and came up with the idea of wrapping coloured strands around an open picture frame. I placed the frame on a motorized rotating platform and set my camera to multiple-exposure mode. I shot at 64 equidistant positions as I rotated the platform. Since I didn't complete a 360° rotation, the design is asymmetrical.

Camera:	Nikon D850
Lens:	Nikon AF-S 24-85mm f/3.5-4.5G ED VR
Exposure:	1/5 sec, f/4.5, ISO64



© Simon Theuma / cupoty.com

Dreamtime

SIMON THEUMA

Underwater 1st Place

Like an intricate tapestry of the marine ecosystem, this image captures the relationship between a commensal shrimp and a mosaic sea star. Dreamtime Aboriginal art reminds us of the delicate balance that exists in the grand tapestry of our natural world – this ancient wisdom serves as an important reminder to preserve what we have. To capture this image, I needed to use a snooted strobe, which was set at an acute angle to the subject. This set-up accentuated the depth and beautiful texture of the two organisms. Additionally, I enhanced magnification by using a +15 wet lens diopter.

Camera:	Nikon D850
Lens:	Nikon 85mm f/2.8G
Exposure:	1/200 sec, f/14, ISO64



© Bernard Van Elegem / cupoty.com

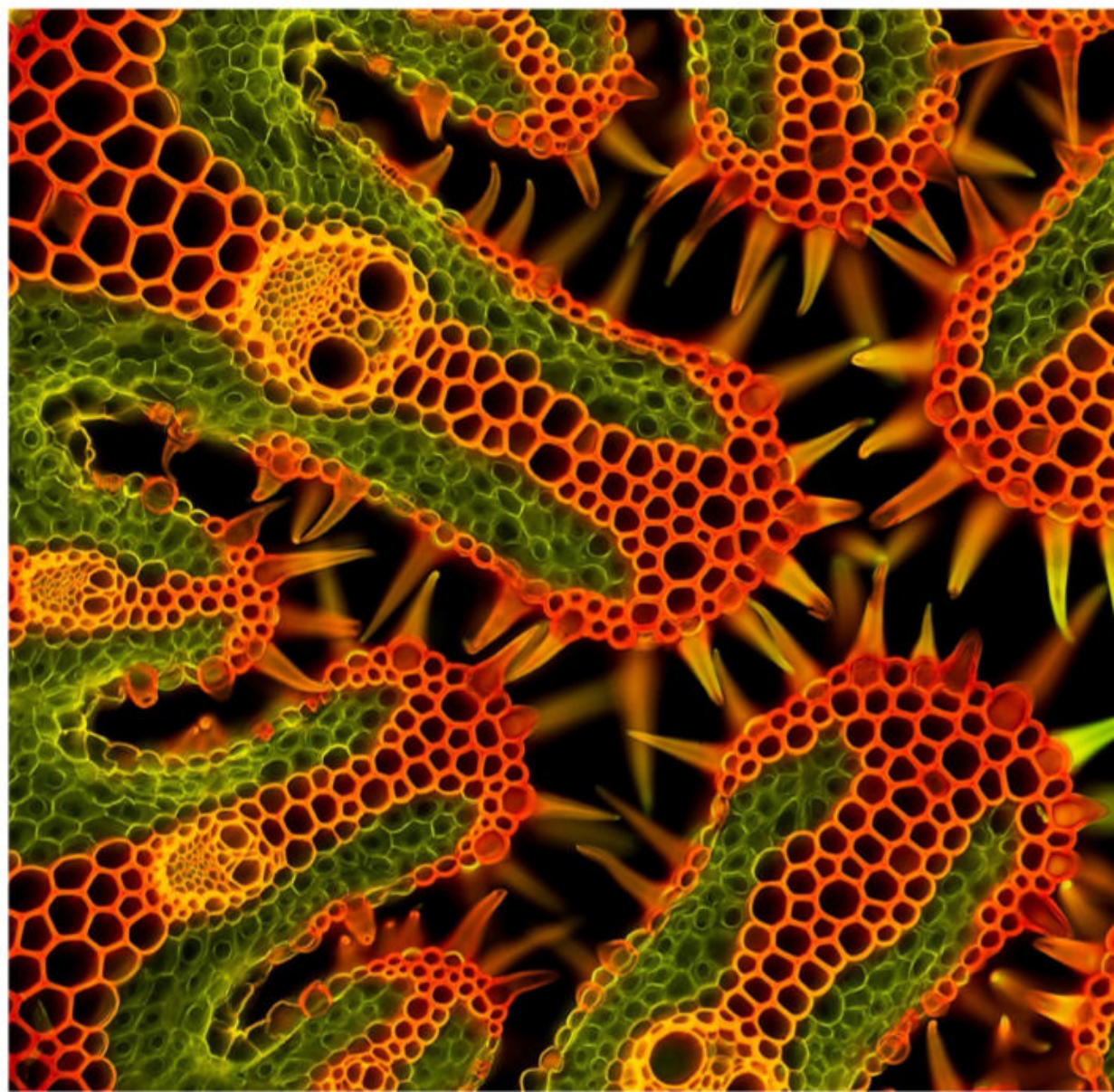
King of Camouflage

BERNARD VAN ELEGEM

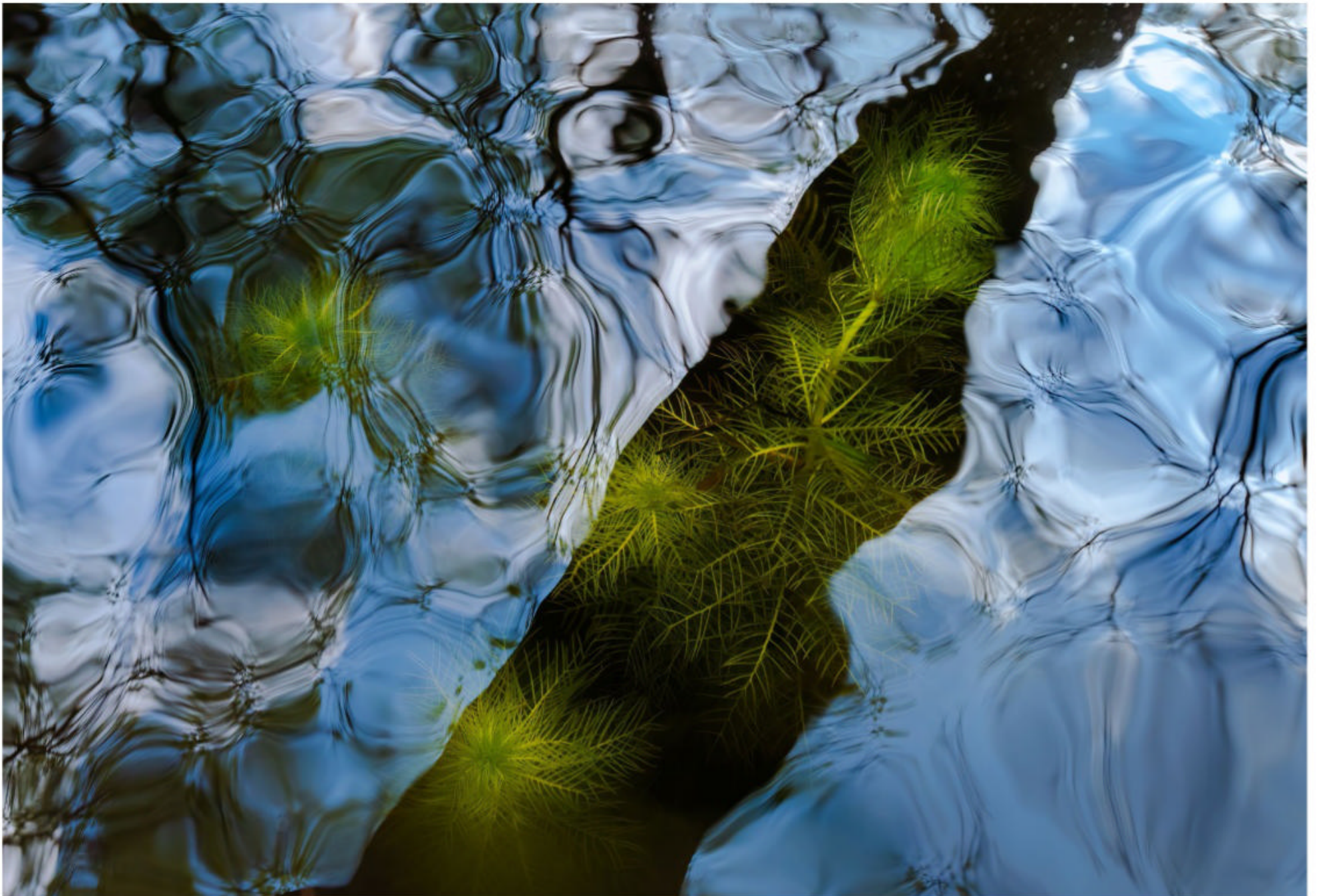
Insects Finalist

This tiny and beautiful ground beetle (*Elaphrus riparius*) is common in the lowlands of Belgium along the shores of lakes, ponds and rivers. Despite the striking pattern and flashy colours of green and blue, this beetle is often extremely well camouflaged. It is also shy and almost always active. For three consecutive days, I spent a few hours lying in the wet mud in the hope of obtaining a few good images. Eventually I found an individual sitting quietly enough for about a minute, which allowed me to capture the image I had in mind. The background was sufficiently interesting and the beetle blended in perfectly.

Camera:	Nikon D500
Lens:	Laowa 100mm f/2.8 2:1 Ultra Macro APO
Exposure:	3 secs, f/11, ISO100



© Gerhard Vlcek / cupoty.com



© Csaba Daróczy / cupoty.com

Undertow

CSABA DARÓCZI

Intimate Landscape 1st Place

In the first days of May, I always return to a small canal near Izsák, Hungary, where the water violet (*Hottonia palustris*) blooms in huge numbers. Unfortunately, flowering was delayed this year and only the leaves were still underwater. I was about to go home when I saw a tree had fallen over the canal and under its reflection the plants were clearly visible. I found it a very exciting subject and played with it for a while.

Camera:	Nikon Z 6
Lens:	Nikon 16-35mm f/4 ED
Exposure:	1/320 sec, f/9, ISO1250

Beach Grass

GERHARD VLCEK

Micro 1st Place

This image shows a 30µm cross-section of beach grass (*Ammophila arenaria*) stained with Auramine O and Safranin and viewed under fluorescence blue excitation. I had to slice the sample and fix the stems in warm liquid polyethylene glycol. As it cools down, it turns solid and the embedded stems were sliced. I had to use the tiniest brush to manipulate the less than 1mm parts in staining and chemical solutions. Taking the shot was the easy part!

Camera:	Nikon Z 6II
Lens:	Olympus SPlan Apo 10/0.40 microscope objective
Exposure:	1/3 sec, ISO100





© Carlos Pérez Naval / cupoty.com

Small Wonders

CARLOS PÉREZ NAVAL

Young Close-up Photographer of the Year

In the walls of some houses in Calamocha – the village in Spain where I live – it's possible to find pyrolusites. These magnesium minerals create stunning formations, which look just like petrified trees, but they are so small that they're tricky to spot. One day, I was lucky enough to find a Moorish gecko (*Tarentola mauritanica*) very close to the pyrolusite's wall, so I tried to make the most of the encounter. I wanted to capture a gecko in the 'petrified forest' for a long time, but they only recently appeared in my village – probably carried in fruit baskets from hotter areas. Due to climate change they can now survive here. 🦎

Camera:	Nikon D500
Lens:	Nikon 105mm f/2.8
Exposure:	1/4 sec, f/8, ISO1250



Close-up
Photographer
of the Year

These are a selection of winning and awarded Nikon images from the Close-up Photographer of the Year 5 competition, which attracted almost 12,000 entries from 67 countries, and aims to reveal the hidden wonder of the world through close-up, macro and micro photography. The sixth Close-up Photographer of the Year competition opens in May 2024. For further info, and to join the CUPOTY community, visit www.cupoty.com

— WHITEWALL —

Black & White



Gregory Prescott

"White Feather"

Photo Print on ILFORD B/W Paper sealed under Acrylic Glass

42 x 56 cm | Floater Frame Basel, white matt | printed and framed by WhiteWall.com

Bringing photography to completion

When an image becomes visible as a print, it transforms from an abstract idea into reality. For WhiteWall, that means that a picture is only complete once it is hanging on the wall. We achieve perfection through craftsmanship, innovation, and use of the very best materials. Our award-winning gallery quality is always accessible to photo enthusiasts both online and in our stores.

SUBSCRIBE TODAY AND GET A LOWEPRO PASSPORT DUO BACKPACK*

**GIFT
WORTH
£29.99!**

Great reasons to subscribe now!

- ✓ **Never miss an issue**
Get each and every issue of *N-Photo* delivered directly to your door or device, so you need never fear about missing out on your favourite photo mag
- ✓ **Pay less than you would in the shops**
Enjoy six issues worth of *N-Photo* for just £27.99 – that's just £4.67 an issue for a print-only subscription compared with our £5.99 cover price
- ✓ **Free LOWEPRO PASSPORT DUO worth £29.99**
We'll give you this fantastic convertible backpack – worth £29.99 – to keep your precious Nikon kit safe from harm when out and about on photo shoots
- ✓ **The latest tips and insights**
Each month, a subscription to *N-Photo* challenges and inspires photographers to take truly phenomenal photos and get the best result from their kit

Option 1

**Print Only
£27.99**

- Six issues of *N-Photo* print edition
- Delivery to your door included in the price
- Free LOWEPRO PASSPORT DUO backpack worth £29.99

Option 2

**Digital Only
£21.49 (no bag)**

- Six issues of *N-Photo* digital edition



N-Photo is the only magazine for Nikon enthusiasts by Nikon enthusiasts!

Adam Waring Editor



LOWEPRO PASSPORT DUO

Fits a mirrorless Nikon camera or compact Nikon DSLR

Convertible design easily transforms from waist bag to backpack

Ample padding and adjustable divider system to protect your equipment

Two zippered pockets for quick access to small items

Made from lightweight, weather-resistant fabric that is ideal for travel

Internal dimensions: 270x110x150mm
External dimensions: 290x130x490mm
External dimensions (collapsed) 290x130x200mm

Subscribe to *N-Photo* today at
www.magazinesdirect.com/NPHPASSPORT
Or call 0330 333 1113 and quote 'C85D'

**SUBSCRIBE
SCAN HERE!**



* Offer closes 30 April 2024. Offer open to new subscribers only, and only available on print purchases. Direct Debit offer is available to UK subscribers only. Your gift will be delivered separately within 60 days after your first payment has cleared. Gifts only available to subscribers on the UK mainland with the purchase of a print or premium *N-Photo* subscription. In the unlikely event that we run out of this gift, we promise to offer you an alternative gift of the same or greater value. Please allow up to six weeks for delivery (up to eight weeks outside of the UK). Payment is non-refundable after the 14-day cancellation period. For full terms and conditions, visit www.magazinesdirect.com/terms. For enquiries and overseas rates please call: +44 (0) 330 333 1113. Lines are open Monday-Friday 8:30am-7pm, Saturday 10am-3pm UK time (excluding Bank Holidays) or email: help@magazinesdirect.com. Calls to 0330 numbers will be charged at no more than a national landline call, and may be included in your phone provider's call bundle.

How to shoot...

Cracking coastlines!

Oh we do like to be beside the seaside... with its dynamic seascapes and wonderful wildlife. Here's how to capture it!

S

tick your hand up if you love being by the sea! There are probably deeply rooted, biological reasons why we are so drawn to water, and it is not hard to understand why photographers make a beeline for the coast at every opportunity. The coast is an ever-changing landscape, bursting with drama, motion, and interest. Large sandy bays form wonderful, large open spaces that provide so much

freedom for expression and creativity. The coast can be calm and tranquil, or rugged, wild and dangerous. Picturesque coves, inlets, sea stacks, sand dunes and rocky foreshores provide endless picture potential. Man-made objects – such as romantic castle ruins, lighthouses, sea defences, piers, jetties, sea pools and beach huts – add further appeal. The coast is also a rich and varied habitat for wildlife – from tiny barnacles to huge colonies of seabirds.

The coast is a great landscape type throughout the seasons. While large sandy beaches are typically best avoided in the summer months due to the number of tourists, at other times of the year, beaches and coast paths can be deserted. The coast is at its most wild and

How to shoot... CRACKING COASTLINES!



Ross Hoddinott

Ross is a multi-award-winning professional photographer with a lifelong love of nature and the outdoors. He's a Benro Ambassador, LEE Master and Nikon Alumni, and is also the author of eight books.
www.rosshoddinott.co.uk

All images: © Ross Hoddinott



How to shoot... CRACKING COASTLINES!



[1] Durdle Door: it's often preferable to get close to the water's edge to capture images that have a sense of energy and flow.

[2] Holywell Bay: texture and sand patterns can provide engaging foreground interest.

impressive during the winter months, but in spring stretches of coastal clifftops are ablaze with wildflowers. Meanwhile, each receding tide reveals a clean, untouched beach ready to explore. Rocky bays are full of interesting geology, natural patterns and textures that deserve a closer look.

Quite simply, the coast offers endless picture appeal... and our guide to coastal photography will help you successfully capture the character, mood, and beauty of the seaside.

DOWN BY THE SEA

The sheer power, drama and energy of the sea is captivating and hugely photogenic. Meanwhile, beaches are home to a wealth of interest, including reflective pools, rocky outcrops, smooth boulders and wavy sand patterns. It's an ever-changing landscape full of potential. But to get the most from your visit to the coast, planning and timing is important. The weather, tide, sun's position and time of year all influence photo opportunities.

Planning

A degree of planning is important when shooting any type of landscape, but it is particularly important when close to the sea. Firstly, be aware of tide height – and not simply whether the tide is coming in or is on its way out, but also the tidal range (the difference in height between high tide and low tide). Tidal range varies massively

depending on location and moon phase. Larger tidal ranges occur during spring tides due to the gravitational force of the moon and sun aligned. A neap tide is when the tidal range is at its smallest.

This is important to know, as during spring tides more beach is revealed at low tide, and at high tide the sea will advance much further. The tide falls and rises faster too. Not only will this affect photo opportunities, revealing or immersing key foreground elements, but it is vital you understand tides from a safety viewpoint – otherwise, you could end up getting wet feet, or worse, cut off.

Before you visit the coast, download a good tide app like AyeTides, My Tide Times, or Tides Near Me. But remember that tide tables are still only a guide – air pressure and weather can affect tide height, with high-pressure systems depressing sea levels and low-pressure pushing them higher.

Timing

Preparation is important. Ideally, recce locations before revisiting at the optimum time. Some beaches and coves work better at a low, mid, or high tide and ideally you should know this in advance, with a few potential compositions already in mind.

If possible, visit the beach on a receding tide – this is generally safer, and sand will be pristine and free of ugly footprints. Check the sun's position and weather forecast too. Big sandy bays are best avoided during daytime, particularly on warm days



Be careful to avoid sand getting into your backpack – always zip bags up fully in windy weather when sand can blow about

2



3



4

Kit list for the coast

Zooms are most versatile for beach photography, allowing you to change composition without needing to change shooting position or lens. An ultra-wide-angle zoom is ideal if you intend capturing foreground interest and motion. The Z Nikon 14-30mm f/4 S is a great option for Nikon mirrorless users. A 24-70mm will prove useful too. Both a polarizer and ND filters will be handy, and a remote cord or device will allow you to trigger the shutter at just the right moment without physically depressing the shutter button (which can soften image quality). A tripod is essential in low light or when using filters to blur water movement. A smartphone with apps for the tide, weather and an augmented view of the sun's path will put you in just the right place at the right time.

and during holidays when tourists, dog walkers, surfers and sunseekers make it tricky. Early morning and late evening are typically the optimum times of day – not only does the best light and drama occur, but beaches are quieter too.

You will often want to get close to the water's edge where you can capture motion and action. But it is easy to misjudge waves, so wear good, grippy wellington boots – ones with a neoprene lining are the most comfortable and warmest. Wellies will keep your feet dry and allow you to get into the best position to photograph waves rushing in and

[3] Trebarwith Strand: water rushing over foreground rocks will help give your images depth.

[4] St Michael's Mount: be prepared for all weathers. Wear good water- and windproof outdoor clothing on the coast.

dragging back. It might be worthwhile wearing waterproof overtrousers too. It is also important to keep your kit clean. Sea spray can be an issue in windy conditions, so keep a lens cloth – or a disposable lens wipe – close to hand and check the front of your lens and filters regularly.

Avoid placing your camera bag directly on the sand – unless it's protected by a waterproof cover – otherwise you risk it getting damp and sandy. Be careful to avoid sand getting into your backpack – always zip bags up fully in windy weather when sand can blow about. Remember to clean →

How to shoot... CRACKING COASTLINES!



1



2

kit thoroughly after a beach visit – particularly your tripod, which you should wipe down with a damp cloth to remove any corrosive salt water.

WATER MOTION

A sense of motion is a powerful visual tool when shooting seascapes. Although a fast shutter speed is useful for capturing the drama, force and spray of large waves crashing against rocks and sea stacks, a slower shutter is usually the most creative option. Slower shutter speeds will produce interesting water trails, patterns and textures. More extreme exposure lengths will smooth out the water completely and produce a sense of tranquillity and calm. Results can be moody, creative, and ethereal. The sea provides endless photo opportunities.

Long-exposure photography

To blur water motion, you typically need to select a shutter speed exceeding 1/4 sec. There is no optimum length that is guaranteed to work every time – much depends on the water's movement and the effect you desire. However, one second is often a good starting point. When shooting landscapes, you normally rely on mid to small f-stops – in the region of f/11 or f/16 – to generate good depth of field, and a low ISO to maximize image quality. A small aperture and low ISO combined will help produce longer exposures but it still might not be enough to achieve the creative shutter lengths you want, unless you are shooting in low light.

One solution is to use a solid ND filter to slow the exposure and blur water motion in any light – but remember to switch off your Nikon's Auto-ISO, otherwise the camera will simply set a higher ISO to compensate for the filter's density and you will end up with a noisier file, rather than a creative seascape. As you would expect, it is important to use a tripod when shooting longer exposures.

Timing is important

While there is a trend to opt for extreme exposures of 30 seconds or longer when shooting the coast, longer is not always better. An exposure of around one second is long enough to produce an intentional and engaging level of motion that retains detail and texture within the water movement – with longer exposures, water can become too silky and smooth.

It is obviously subjective, though – it is down to personal taste. It is important to experiment, adjusting the strength of ND filter and/or ISO sensitivity to generate different shutter speeds and effects. Timing is important too. Onrushing waves can look messy and chaotic – it is often better



Take a series of shots – you will find one frame always stands out from the rest, boasting just the right movement and look

ND filters

ND filters are available as either screw-on or square filters (used in conjunction with a slot-in system). Variable NDs are also available, which allow you to adjust the filter's strength. All leading filter brands produce ND filters, with Kase and LEE Filters being among the most popular. NDs are tinted and absorb light – without altering colour – to artificially lengthen shutter speed for creative effect. They are available in various densities, ranging from one to 15 stops in strength. The three-, six- and 10-stop versions are particularly popular and effective for seascapes, influencing mood and movement.

[1] Dawlish Warren: extreme ND filters are useful for blurring waves and clouds, creating eye-catching results.

[2] Trebarwith Strand: a LEE Filters Little Stopper was used to generate a creatively long 30 sec exposure length.

[3] Godrevy Lighthouse: coastal scenes boasting water trails and colourful skies are particularly suited to extreme exposures of a minute or longer.



to trigger the shutter the moment a wave drags back towards the sea, when movement is more predictable and orderly, washing around foreground objects, defining their shape, and creating attractive trails and patterns. Use a remote cord or infrared device to trigger the shutter at the right moment – don't rely on your camera's self-timer as it's harder to get the timing just right.

Water movement will inject your shots with energy and depth. Try to keep compositions simple and uncluttered, though. When shooting motion, every shot will be unique, capturing wave action and movement slightly differently. Therefore, always take a series of shots – you will find one frame always stands out from the rest, boasting just the right movement and look.

CLIFFTOP VIEWPOINTS

When visiting the coast, the temptation is to get close to the action and shoot from the beach, next to rushing waves and interesting rocky



How to shoot... CRACKING COASTLINES!



foreground. Higher-up viewpoints can get overlooked, but when visiting stretches of rugged, dramatic coastline, make the effort to follow the coast path along the clifftops and explore the far-reaching, elevated views. Big vistas often require a bit of legwork and a climb, but it is worthwhile.

Elevated views like this enable photographers to capture shots with an enhanced feeling of scale, context and grandeur. They are also a good option when sea spray makes shooting from sea level impractical. However, in very windy conditions, avoid getting close to exposed, cliff edges.

Composition and light

The most interesting clifftop views tend to include towering sea stacks and rugged coastline that direct the viewer's eye through the composition, from front to back. While the coast and sea are the main focus, light play is often key to capturing standout images. Light and shade will provide depth,

[1] Bedruthan Steps: coastal flowers will add a seasonal feel to clifftop vistas. Employ a large depth of field to capture sharp scenes throughout.

definition and contrast, and spotlighting can highlight key areas of the scene. Soft, low sunlight will add warmth and beauty to big vistas like this, so aim to shoot coastlines during the golden hours – just after sunrise and prior to sunset. The light's quality is typically at its best during these times.

Before visiting the coast, use an app to calculate the sun's position in relation to your viewpoint to help you decide which end of the day is best-suited to the location. For example, evening light is best when shooting north-facing coasts due to where the sun sets. If you can't rely on local knowledge, some remote planning can ensure you don't make wasted trips. Check the forecast: while a colourful sunrise or sunset will provide beauty, a menacing, stormy sky will convey far more atmosphere and drama.

Lens choices

Pack both a wide-angle and tele-zoom in your kit bag. A wide-angle, in the region of 16-35mm, is the



best choice when you are above a vertical drop, providing a wide enough perspective to allow you to capture both the coastline stretching into the distance, together with the wave action below. Wide angles will help you to include foreground objects – and exaggerate their scale and significance.

Rocky outcrops, footpaths, stone walls and benches are among the things that you might decide to include as an entry point or to lead the viewer's eye into your composition.



During spring and summer, coastal clifftops can be carpeted in wildflowers like thrift, sea campion, bluebells, vetch and heather

Keep it stable

Stability can be an issue when shooting from clifftops, as viewpoints tend to be exposed and the ground can be spongy in places. Ideally, replace the rubber feet of your tripod with spikes that you can securely push into the ground. Spikes will greatly reduce the risk of any camera motion softening results. Also, trigger the shutter remotely as physically depressing the shutter release button can inadvertently cause camera movement. A cable release, dedicated camera app or infrared device will allow you to take photos without touching the camera – or, if you are not having to precisely time when you take your photo, use your camera's self-timer.



[2] Botallack: morning or evening light will typically produce the most magical and interesting results.

[3] Pordenack Point: clifftops are exposed, so take care where you set up in gusty conditions. Use a sturdy tripod and keep a safe distance from steep drops.

During spring and summer, coastal clifftops can be carpeted in wildflowers like thrift, sea campion, bluebells, vetch and heather. Not only will flowers add a seasonal feel to your shots, but they'll provide welcome interest and colour impact to foregrounds. Try getting low and close to flowers so they loom large in frame. Opt for a small aperture, in the region of f/11-16, to generate a greater depth of field.

If you are struggling to keep both foreground and background acceptably sharp, focus stack. Several Nikons now offer Focus Shift Shooting (found under the Photo Shooting Menu), which automates the stacking process. If there are choppy and foamy trails on the sea, longer exposures tend to work →



1

[1] Galapagos sea lion: a low viewpoint will often produce the most natural-looking perspective when shooting birds and mammals on the beach.

[2] Puffins: when shooting seabird colonies, look to capture interaction, interesting behaviour or courtship.

[3] Nests: with nesting birds frequently returning to their burrow or nest, hone your flight photography skills. Select a high ISO to generate a rapid shutter speed.

well, producing interesting patterns and texture on the water surface. But don't automatically reach for an ND filter. Fierce, angry seas and large, crashing waves are usually best captured with a faster shutter. If necessary, increase ISO sensitivity to generate a shutter exceeding 1/500 sec to freeze the water's motion. Timing is key when shooting crashing waves – don't be afraid to capture a burst of frames to capture the best shapes, movement and drama.

COASTAL WILDLIFE

The coast is a haven for wildlife, including basking and bobbing seals, vast colonies of noisy seabirds, waves of waders, wide-eyed crabs and tiny molluscs. Each animal has its own set of challenges and rewards. It is a rich and varied habitat that can be tricky to work in, with changing tides, steep cliffs, slippery rocks, strong winds, moving sand and sea spray adding to the challenge. But the sheer variety and abundance of life at the coast makes it an obvious place for nature enthusiasts to visit with their Nikon and telephoto lens.

While some animals can be reclusive and hard to get near, there are many places along the coast

where wildlife is abundant and tolerant to being approached. The most obvious are large seabird colonies – in the UK, places like Skomer Island, Bass Rock, The Farne Islands and Bempton Cliffs provide incredible opportunities for wildlife photography, with important populations of gannets, Atlantic puffins, razorbills and kittiwake within easy reach.

A focal length upwards of 400mm is required for frame-filling shots and subjects in flight, but carry a shorter standard zoom too – in the region of 24-70mm – to capture wider, environmental results. Colonies of seabirds are best visited during



Shooting into the light can produce dramatic results, with golden rim light and backlit feathers, but beware of flare

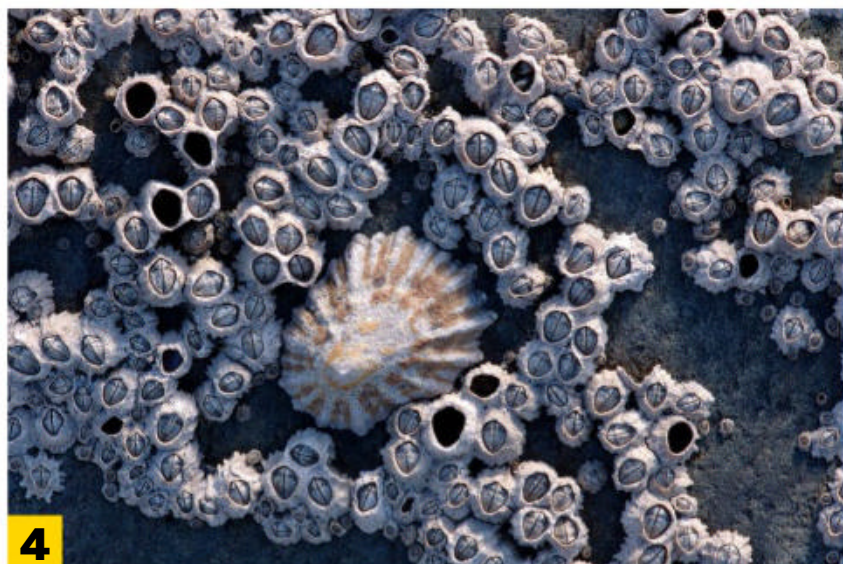


2



3

COASTAL WILDLIFE



4

Also look out for...

Don't just look for wildlife of the feathered and furred variety at the coast. Vast colonies of barnacles, mussels and limpets create interesting patterns in close-up. Also, look for colourful and curious anemones in rockpools – use a polarizing filter to eliminate reflections from the water surface. Crabs are interesting subjects, although they are secretive and challenging to shoot. Take a closer look at any large chunks of driftwood washed up on the shore – goose barnacles will attach to flotsam and suit being shot in close-up. Attach a macro lens or close-up attachment to fill the frame. A reflector or small LED light can be useful lighting aids when shooting smaller coastal subjects.

peak activity throughout June and July, when parents are raising young and are regularly returning to nests or burrows with mouthfuls of fish or sand eels. Subjects are typically very approachable, but always keep to paths and designated public areas. The hustle and bustle of activity provides endless photo opportunities.

A low viewpoint often works well, producing more natural, intimate eye-level shots. Select a large aperture to produce a shallow depth of field to help you cleanly isolate your subject from its surroundings and background clutter.

It is often best to stay in one position – remaining patient and observing behaviour – rather than moving about and trying to 'chase' the action.

All about the light

When positioning yourself, think about the light and its direction. Flat, overcast light is great for portraits, while overhead sunlight and blue skies can be suited to shots of birds in flight. Shooting into the light can produce dramatic results, with golden rim-light and backlit feathers, but beware of flare – keep a lens hood attached to help prevent this and provide your valuable optics with a degree of physical protection too. Early morning and late evening light will produce the best drama.

However, many of the best seabird colonies are

[4] Barnacles: take a closer look at rock pools for less obvious subjects, like barnacle and mussel colonies.

[5] Wheatear: a focal length upwards of 400mm is best when stalking coastal birds.

[6] Sally Lightfoot crab: get down low and lay on the beach to capture crabs eye-to-eye.

located on little islands with access only possible during daytime, in which case you have little choice.

Seal the deal

Seals are full of personality and one of the icons of our fascinating marine ecosystem. They are easiest to photograph when they congregate during breeding season. Therefore, it's essential you are respectful, responsible and keep your distance – your subject's welfare must always come first. Approach subjects quietly and slowly, avoiding sudden movements. Avoid getting between a mother and her pup, or between a seal and its route back into the sea.

If you need extra pulling power, consider attaching a Nikon 1.4x or 2x teleconverter (to any compatible lens) to extend its range and allow you to shoot from further away. Low viewpoints typically work best – lay on the sand and consider using a beanbag to support your setup. A low perspective not only looks more natural, but helps to render backgrounds attractively out of focus.

Wear drab, water and windproof clothing and be prepared for sand to get everywhere! Purchase a rocket blower to help you safely remove abrasive sand from your kit. Unsurprisingly, golden light will normally create the best images, so get up early and stay out late. To help your images stand out, be →



5



6



patient and wait for moments of behaviour or interaction – for example, rival males clashing or an intimate moment between a mother and her young.

THINGS TO SHOOT AT THE COAST

Aside from classic beach views and coastal vistas, there is no shortage of interesting subjects to discover and photograph when you visit the seaside – both natural and man-made.

Beach huts

Beach huts are quintessentially British. Rows of colourful huts can create striking compositions, particularly when using a wide-angle or fisheye lens and low viewpoint. Attach a polarizer to boost colour impact. Consider using a short telephoto to isolate key areas of interest – like blistering paintwork, rusty keyholes, or door handles.

Sea pools

Man-made sea pools are great fun to photograph. Metal hand railings, barriers, and the sharp lines and shapes created by the edges of the pool can all prove useful compositional tools. Isolate key points of interest and detail using a tele-zoom – a 70-200mm is often a useful focal range. Think minimalism and look to create arty, abstract results if the opportunity allows. At higher tides, use water motion to add flow and interest.



Try including negative space and using an extreme exposure to produce simple, fine art-style results

[1] Westward Ho: old groynes, wooden posts and sea defences make great subjects, directing the eye into the scene.

[2] Amble Pier: bold structures like piers are well suited to low-light photography and lengthy exposures.

[3] Bladderwrack: seaweed can form wonderful patterns and repetition in close-up.

Sea defences

Scattered along the coast are various sea defences – for example, wooden groynes stretching out to sea, which are designed to check erosion. These can make great subjects and suit long exposure photography. Older groynes, which are weathered and worn, are particularly photogenic and suit the black-and-white treatment. Also look for remains of World War II placements along the coast, like pillboxes and concrete tank blocks. These often suit a minimalist approach.

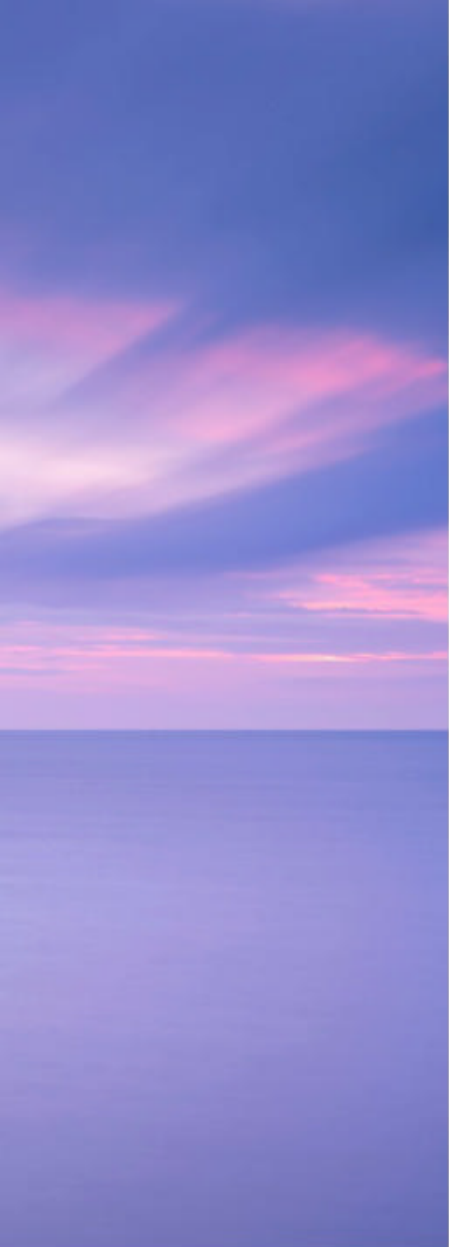
Breakwaters

Breakwaters, harbour walls and piers are all hugely photogenic. Many are old, stone structures that look superb when converted to mono. Breakwaters that are curved or zigzagged are particularly interesting compositionally. Try including negative space and using an extreme exposure to produce simple, fine art-style results. A lengthy exposure will also blur cloud movement, rendering them as attractive streaks or like brushstrokes.

Lighthouses

Lighthouses have universal appeal – they are romantic structures in remote, inhospitable and photogenic locations. They are located all around the coast – some are more accessible than others.





3

The best time of day for lighthouse photography is at dawn and dusk, when the light is in operation, but the landscape is not completely dark – or when the sea is wild and the sky looks dark and menacing. They are interesting buildings that can suit being shot close-up filling the frame. However, you are more likely to capture engaging results by shooting them in context with their coastal surroundings.

Geology

There is no better provider of intriguing and fascinating patterns, detail and repetition than nature. Rock strata, sandstone, boulders and pebbles all deserve a closer look. Use a macro lens or the long end of a standard zoom to isolate key areas of interest, texture and colour. Results can look quite abstract – flat, overcast light is well suited to images of detail.

Sand patterns

A receding tide creates and reveals fresh sand patterns. Ripples and wavy patterns look striking in frame-filling close-up. Low sunlight will add warmth, contrast and deep, defining shadows. Look for ‘sand trees’ forming close to beach streams and little inlets. An overhead viewpoint, looking directly downward, is normally best. Select the Cloudy or Shade white balance preset to warm up results.

[4] Bamburgh Castle: marram grasses photograph particularly well when bathed in warm sunlight. Select an exposure of 1/2 sec or longer to add a sense of motion.

[5] Alnmouth: tank blocks might not seem like a very glamorous subject, but they suit long exposure and black-and-white photography.

[6] Luskentyre Beach: after windy weather, look for fresh wavy sand patterns among the sand dunes.

Sand dunes

Large, imposing dune systems, rising from the beach, provide elevated views of sandy bays. Marram grasses, wildflowers and pristine sand patterns provide no shortage of foreground interest. Gently swaying, wind-blown grasses will add energy and rhythm to foregrounds – an exposure of 1/2 sec is a good starting point, depending on wind speed. Look for paths and gaps in the grasses that you can include to invite the viewer’s eye.

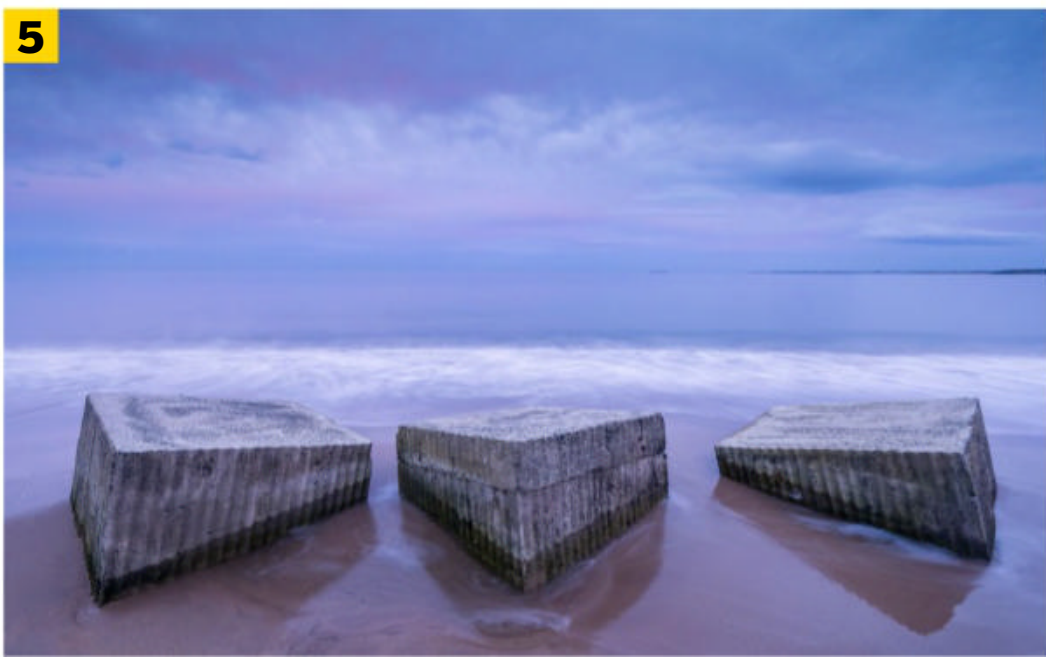
Seashells

On many beaches the shoreline will be littered with tiny, colourful seashells. Mussels, cockles, scallops, razor shells, periwinkles, cowries and whelks are among the most widespread. You might wish to shoot them in situ or collect and arrange them. Use a macro or close-up attachment to get frame-filling shots, and experiment with depth of field.

Seaweed

Seaweed is easily overlooked yet is beautiful in close-up. Toothed wrack, kelp, and bladderwrack are among the most common types you’ll find carpeting rocky seabeds. Get close and highlight shapes, curves and repetition. Use a polarizing filter to regulate reflections and shoot in either golden hour light or in overcast, low-contrast conditions. **M**

5



6





**Paul
Wilkinson
Go Pro**

Paul Wilkinson FMPA FBIPP FSWPP is a multi-award-winning international photographer and co-author of the best-selling book *Mastering Portrait Photography*, and shares his skills through the free companion site MasteringPortraitPhotography.com. In this monthly series he shares his experiences and stories as he talks about the trials and tribulations of becoming a pro photographer.

Finding opportunities for change is now my challenge

The weather is miserable, we've put on a pound or two and spent too much but now is the time of year to rekindle our optimism and go for it...



As I am sitting writing this, it is the beginning of a bright new year: the Christmas decorations are about to come down, the sherry bottle has just a few drops left, there is chocolate in the fridge (I doubt it will last much longer) and I am back in the studio, pondering the next 12 months – the things I would like to achieve, the targets we'll set the business (and myself) - and mulling over the previous 12.

I have no idea why we think 1 January is, for some, a talisman for change, but here it is, our once-a-year 'things will be different' moment.

I will be honest, I have an issue or two with New Year. Firstly, there is the sinking feeling that everyone is having glorious parties while I am happy to have a quiet one with my family and friends. Then there are the few weeks of saying 'Happy New Year' to everyone you meet (and worrying that you've already said it or that the moment has now passed). But most of all, I wouldn't say that I like New Year's resolutions. It's not the resolution that irks me – how can deciding to do something be anything other than a positive? – but the fact that we collectively wait until some arbitrary date on which to do it.

As long as it's not changing my beautiful wife or enchanting home (some things are too good to give up), change, for me at least, is good, as I get

bored quickly. But here's my problem – why do we have to wait until the first day of January?

Does the gluttony of the festive season make it easier to hit that diet? Possibly. Will you write in your diary more often because you've received a new pen as a Christmas present? Maybe.

But will you read more, eat less, get in touch with old friends, be more social, be less grumpy, get more sleep, eat more fibre or ditch the car for the bike because it's the beginning of a new year? That's very doubtful.

Let's crack on

I am a huge fan of making changes to my life at the drop of a hat – particularly given (and this is if I'm lucky) I will only get about 30,000 days on the planet. With such limited time, why tolerate things I'm unhappy with?

I argue that if I want to change, let's crack on and get it done. JFDI. (I'll leave you to Google that one!) There is no time like this day, this hour, this minute, this second. Okay, maybe this week, but you get the gist. Being a professional photographer – earning



Our competition isn't waiting for me – and it certainly isn't waiting for the beginning of a new year!

your living this way – is a process of continuous change. It has to be like that. Everything you create is easy to emulate, especially if, like me, you also run training courses and workshops. In doing so, I will be literally showing people how to become my competition. But they are only my competition if I stand still and don't stay ahead. If I keep adapting and evolving, then I am a moving target. Therefore, change is at the very heart of our success.

Social photography

Our competition isn't waiting for me – and it certainly isn't waiting for the beginning of a new year. But that's not to say that the beginning of the year isn't a great moment to get stuff done. If you work in social photography, like me, it is a naturally slow point at the beginning of the year.

So I do love this time of year. It's a little like the misty calm of a dawning day or the invitation of a fresh page in your notebook, empty yet full of possibilities. I may not like New Year's resolutions, but I do love January's sense of anticipation. Every year, it fills me with optimism and energy to keep me running until the summer's warmth is upon us, with its ice creams and incessant calendar.

The weather is miserable, the festivities have cost a small fortune, people have put on a pound or two (okay, maybe I am speaking for myself here). It means that the diary is a little less crammed than it will be in just a few months. Once we get to March, it doesn't calm down again until December.

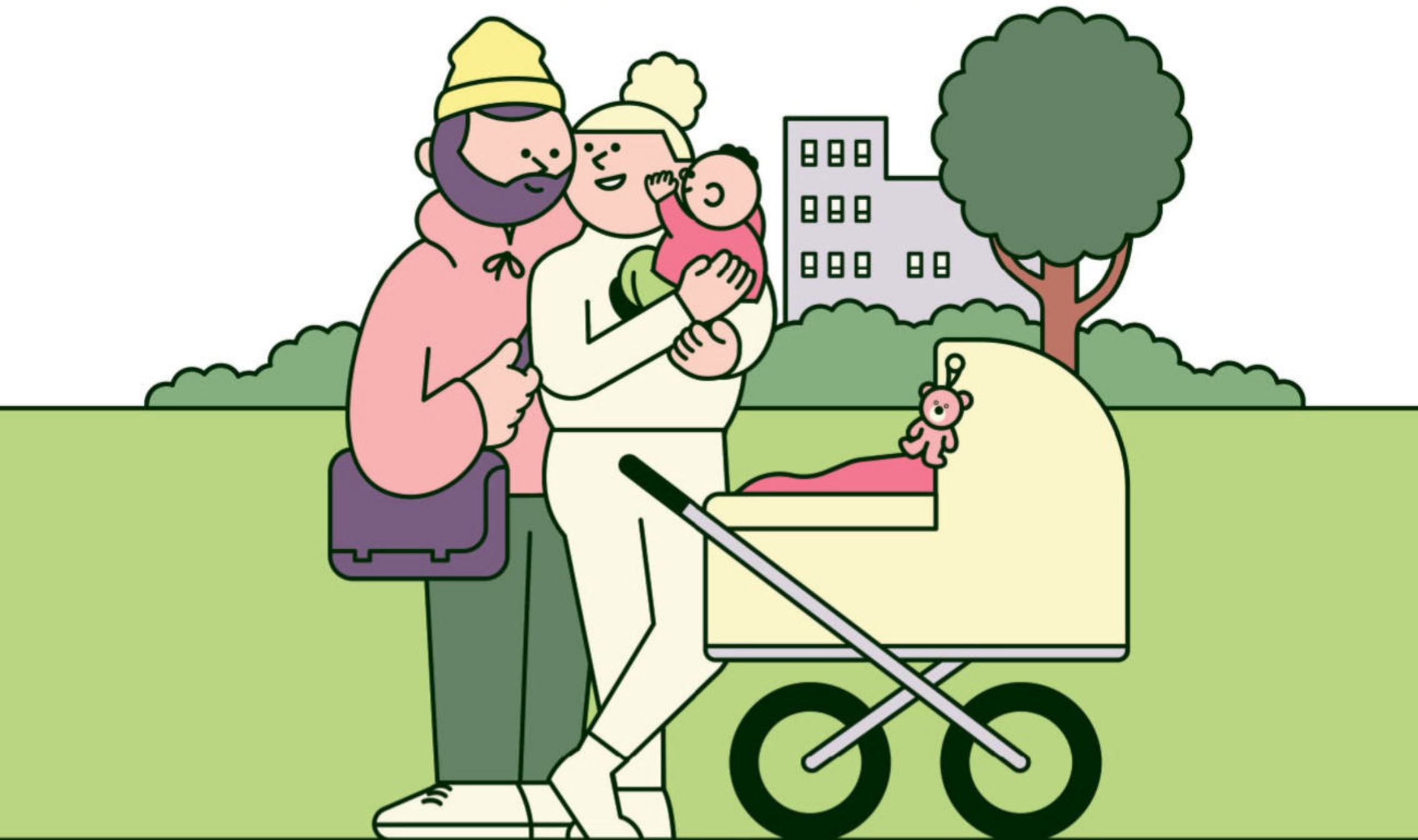
I will take this brief opportunity to sort out my studio, refresh some paintwork and do a clear-out run or two to the tip. As for New Year's resolutions? Well, I am determined to make changes whenever they occur to me. That is my New Year's resolution. And yes, I am aware of the slight irony in that approach. ■

There is a naturally slow point at the beginning of the year, but think of the busy months ahead.



WE'VE GOT THE OPTIONS. YOU MAKE THE CHOICE.

Car, home and travel insurance plus
broadband, breakdown cover and more.



GO.
COMPARE

Get more info or compare quotes for
a range of products at [Go.Compare](https://www.go.compare).

NPhoto Nikon Skills

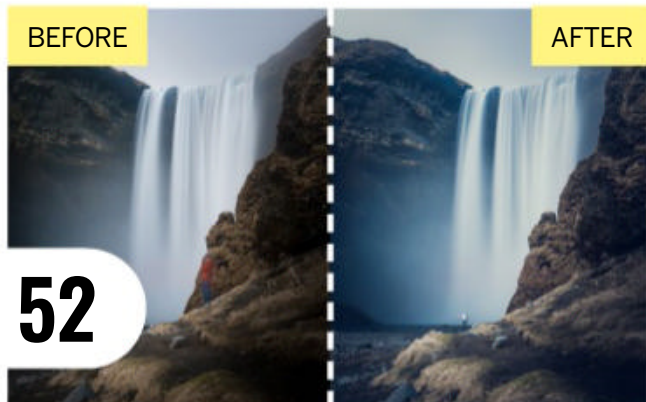
Ingenious recipes for stunning shots



42

Delve a little deeper with your Nikon

Conquer low light and challenging environments to capture the claustrophobia of caving



52

Heal in Lightroom and ACR

Tidy up images in Adobe Camera Raw and Lightroom and avoid Photoshop altogether



54

Creative cross polarization

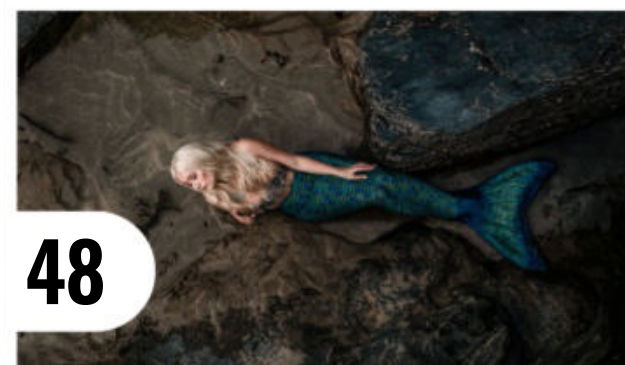
Transform champagne flutes into spellbinding abstract images with a filter in minutes



44

A time for reflection

Why framing a water feature can double the impact of your wildlife photographs



48

A little bit fishy

Capture a magical mermaid moment with these tips for shooting fantasy portraits



50

The long-exposure look

Use the Stack feature in Affinity Photo to combine photos and blur choppy waters



Whenever you see this logo, it means there's a video to accompany the tutorial, taking you through things step by step. If a tutorial has accompanying project files, there will be an accompanying download link too.



Project one: Cave photography

Delve a little deeper

Adam Atkins explains how he wields his Nikon in super-tight spaces and with next to no light

Subterranean places make superb subjects. There's a joy to moving through these beautiful and seldom-seen locations. Each trip is a very rewarding journey of discovery, if damp, cold and, at times, uncomfortable...

There's no natural light below the earth's surface, so head torches and flashguns are essential tools. With long exposures and selective lighting there's incredible scope

for creativity. Keep the shutter open while you 'paint' the scene with light. But too much light will ruin the mystique; embrace the shadows and keep things atmospheric.

Caving is dangerous and requires specialist navigation skills. Newcomers will need to contact a caving guide to get in and out safely, and joining a local caving club is a great way to get into the hobby, too.

Expert Tip



If your model is coming out blurred with your chosen long exposure, try lighting them with your flash instead. Set your flash to manual at 1/8 power. Take a shot, once your shutter is open fire the flash at your subject using the test button on the back. It will fire a quick burst of light. Review and adjust the flash power if necessary.

How to shoot inside a cave

1 Do your research

Decide what you want to capture first: tight spaces, big caverns, unique formations? You can find them all in the UK. Create a shortlist you wish to capture and jump on the internet to research locations. Clubs are a great resource here, too. Members will know where to go, and more often than not, will be happy to help.



2 Protect your gear

Underwater housings are undeniably the best option to keep your gear safe, but they're clunky, which can make it difficult to operate the camera in tight spaces. My preference is to use an older camera carried in a padded camera bag, within a dry sack. I use a Nikon D700 and an 18-35mm lens with an SB-800 Speedlight.



3 Camera setup

Set up your tripod and select a shutter speed long enough so you can 'light paint' the walls with your own head torch. In confined areas, this might be as fast as two seconds, in larger caves it could be up to 30 seconds or more! Balance your aperture and ISO to expose for your subject's torch and flick to Self-Timer mode.

4 Caving composition

Composing an image in a dark space isn't easy. I like to zoom out to my widest focal length and take a test shot, while using a flashgun to illuminate the passage as much as possible, so I can clearly see my composition. I then zoom in or adjust my framing where necessary, continuing to take test shots until I'm happy.



Camera:	Nikon D700
Lens:	18-35mm f/3.5-4.5
Exposure:	2 secs, f/6.3, ISO500

Head torches can be used to light the surrounding rocks; ask your model to tilt their head so you can use their torch too.



5 Freeze the frame

Ask your model to hold still. Focus on them using single-point AF; shine your torch over them if the AF won't 'bite'. Switch to manual focus to prevent hunting and fire the shutter. Paint light onto the walls with your torch. Extend the exposure if needed; experiment light painting until happy. **N**





Project two: Wild reflections

Double trouble

Mike Harris uses a purpose-built water feature to capture red squirrel reflections

Photographing red squirrels is one of the most spectacular projects a wildlife photographer can achieve in the UK. And while it's almost impossible to capture a bad image of these photogenic critters, variety is key, if you're to return home with a memory card full of Instagram-worthy shots. Wildlife photographer Paul Fowle offers like-minded 'togs the opportunity to photograph red squirrels in the Yorkshire Dales from a pair of purpose-built hides (<https://bit.ly/3ZQPq22>) that offer plenty of variety.

Arguably, the most interesting is the Reflection Pool Hide, situated in front of a shallow water feature, so you can capture incredible reflections. Reflections are a great way to balance compositions by filling the frame with interest. This is extremely useful when working with small animals, where filling the frame is a struggle. If you are unable to visit a hide, you can use these techniques to photograph animals at your local river or pond. →



1 Along the waterfront

While it's entirely possible to capture stunning images along a riverbank or pond, visiting a specialist hide with a dedicated water feature will all but guarantee some degree of success. We visited wildlife photographer Paul Fowlie's Reflection Pool Hide, where a waist-high pool of water is set right in front of a two-person hide. This provides ample opportunity to photograph the woodland's population of red squirrels, as well as a plethora of woodland birds, as they cast beautiful reflections onto the surface of the water.



2 Long and fast

A telephoto or super-telephoto lens is essential in getting close enough to capture small mammals such as red squirrels. The hide allowed us to get very close to the wildlife, so any focal length between 200mm and 400mm was usable. What's most important when shooting in a dark forest is the maximum aperture. A fixed f/2.8 or f/4 lens will allow you to balance lower ISOs with higher shutter speeds, while also blurring woodland clutter in the background. If it's a choice between a slower zoom or faster prime, opt for the latter.



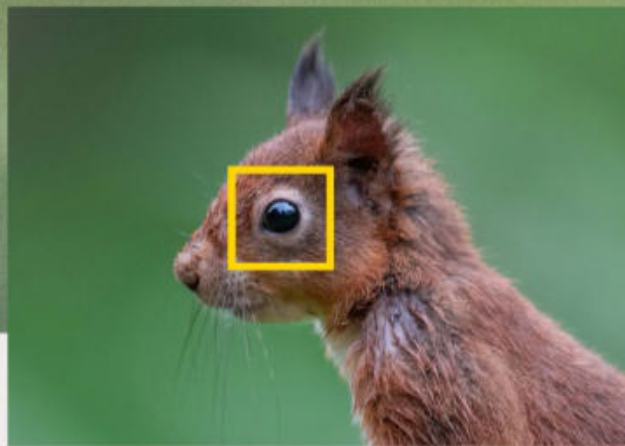
3 Food for thought

Red squirrels are endangered, so the population at the hides is closely monitored. Supplementary feeding adds to the reds' natural diet, helping them through the winter. The area surrounding the hides is the group's natural habit, so they're not being coaxed away from their chosen environment. However, food is scattered along the water bank so photographers are more likely to capture reflections. Any form of feeding is a hot topic among wildlife photographers. If you visit a hide, make sure you research its practices.



Half 'n' half

Focusing on wildlife is never easy and squirrels are particularly difficult as they never stay still for long. However, while you're concentrating on focusing on your subject correctly, it's easy to lose track of your composition, which is vital when capturing reflections. You don't have to plump for perfectly symmetrical shots but be sure to avoid concentrating so much on your subject that you inadvertently chop off its reflection at the bottom of the frame. Set your single focus point in the top third of the frame, leaving plenty of room at the bottom. Be aware, too, that squirrels have long tails and these can easily be accidentally chopped off at the top of the frame.



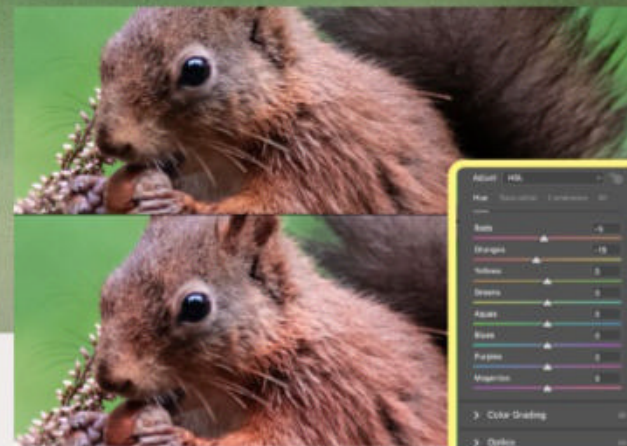
4 Camera settings

Long lenses demand fast exposures, especially if you're using a high-res sensor. 24Mp Nikons can get away with matching their shutter speed's denominator with their focal length (apply the 1.5x crop factor if you're using a DX Nikon). Higher resolution cameras may require a shutter speed that's double the focal length or more, so take the time to get used to your own setup. Set your aperture wide open and use your ISO to balance the exposure. Use single-point AF (AF-C) to focus on the eye or head. You could also use Dynamic-Area AF.



5 Calm waters

Notice how the reflection in the image (left) is blurry and the image (right) is sharp? Both images look good and which one you prefer is a stylistic choice, but you want to capture images with intent. The former was captured shortly after the water had been disturbed, with tiny wakes distorting the reflection. Capturing a mirror-like reflection is harder, because the water has to be perfectly still. This means waiting for a period of time for any movement to subside and then capturing your subject before it disturbs the water.



6 Make the grade

You can use Camera Raw or Lightroom's Color Mixer to selectively colour grade your subject and make it stand out. We focused on intensifying our red squirrel's dashing coat by sliding the Reds and Oranges channels in the Hue panel to the left, and in the Saturation panel to the right. Hit 'Q' in Camera Raw or click the 'YY' icon in Lightroom to bring up a before and after view so you can keep tabs on the intensity of your edits. You'd be surprised how subtle changes can make a big difference, so refrain from pushing the sliders too far. **N**



A carefully sourced costume and a little colour grading allowed Paul to create this 'edgy' fantasy portrait.

Camera:	Nikon Z6
Lens:	24-70mm f/2.8
Exposure:	1/250 sec, f/8, ISO200

Project three: Fantasy portraits

Under the sea

Paul David Smith proves that the seaweed is always greener when you indulge your creativity

I love fantasy photography and had always wanted to create an edgy mermaid concept that didn't look too 'Disney Princess'. This photograph – part of a series called *Mermaid Queen* – was captured at Tintagel Haven Beach, Cornwall. When I finally had the opportunity to realize my vision, I was faced with the huge challenge of working – in peak season – on a very busy beach.

1 Mermaid tails and props

I found that mermaid tails fall into two categories: cheap, cheerful and colourful; or astonishingly beautiful and expensive. I wanted a convincing costume and offset the cost slightly by importing one from America. Small details can bring a scene to life too, so consider adding in one or two little props. I added the crown (bottom left) to help develop a narrative.

2 Find the reel deal

When it comes to fantasy photography, having a model who possesses the look you're going for is essential. I wanted somebody with more of an edgy look, so our model's bleach-blonde hair, long, pointy nails and darker makeup was all intentional and part of the concept. I use a mixture of model portfolio sites and Facebook groups to source models.

3 Scout your Atlantica

I often put more time and effort into finding the right location for a photoshoot than anything else. This involves researching and visiting any potential locations prior to the shoot and at different times of day, so I can predict what the light will be doing. This allows me to turn up on the day, knowing exactly where I want to set up for the best scenery and lighting.

4 Set your camera for success

I often shoot at 1/250 sec when photographing people. It's fast enough to freeze any minor movements and mitigate camera shake. Here, I used an aperture of f/8, because I knew that my 24mm focal length and close background would allow me to capture everything in focus. These settings, combined with the outdoor light, allowed me to keep my ISO nice and low.

5 Add a little mermagic

With most of my fantasy images, I often find myself editing the colours in Adobe Lightroom. The tail, for example, was a little bright for my cinematic-themed vision, so I desaturated it and darkened the blues and greens using the Color Mixer panel. I also removed a lot of rubbish and distractions from the sand using the healing tools. **N**

Expert Tip



Think about your composition. This photograph was taken on a busy tourist beach and I didn't want anybody in the background. So by climbing up onto the rocks and shooting downwards, I was able to keep the background clean in an otherwise-busy location.



BEFORE



AFTER

Project four: Affinity Photo

Get the long-exposure look

Use the Stack feature in Affinity Photo to combine a set of photos and blur choppy waters, says **James Paterson**



www.bit.ly/np160long

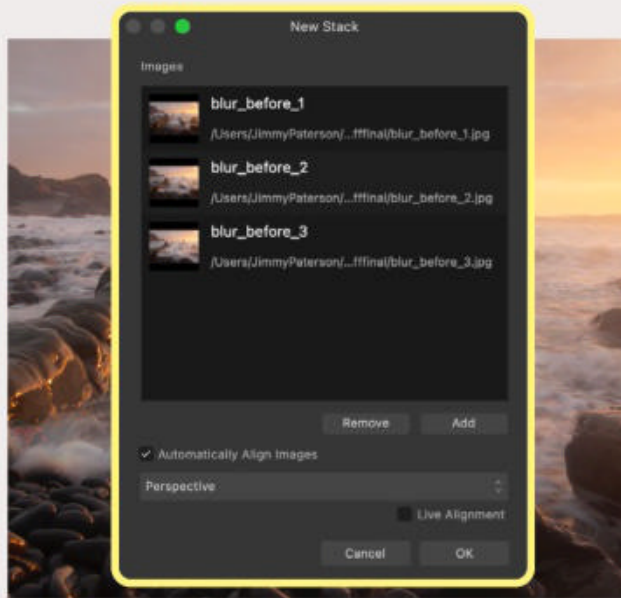
Few photography effects can beat the look of a long exposure, especially the beautiful motion blur you get when shooting moving water with a slow shutter speed. During daylight hours the sort of slow shutter speeds you need can usually only be achieved with the use of a neutral density filter, which slows the flow of light into your camera. But sometimes you can be caught short without a neutral density filter, and the water comes out looking too choppy and detailed. If so, there's another option.

Using a tripod, shoot a series of frames in quick succession of the moving water and then blend the images together afterwards in Affinity Photo.

It helps if the frames you intend to use are shot at your slowest possible speed. Here, our shots were taken with aperture f/16 and ISO100, allowing us to achieve a shutter speed of half a second at sunset. Using a tripod, we captured a set of half second frames. That's long enough to create a touch of blur in the waves but

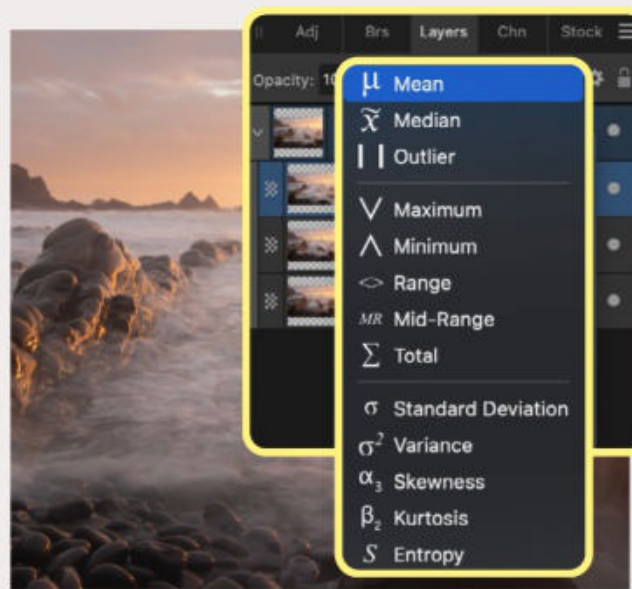
nowhere near long enough to get the misty water effect you really only see with exposures upwards of 30 seconds.

We'll begin here by using the Stack feature to blend our frames with a neat trick that averages out the motion in each, then combine two blending methods before adding filters to enhance the blur. Finally, we can bring in parts from our original images to complete the effect. It's not quite as good as real in-camera motion blur, but it's the next best thing.



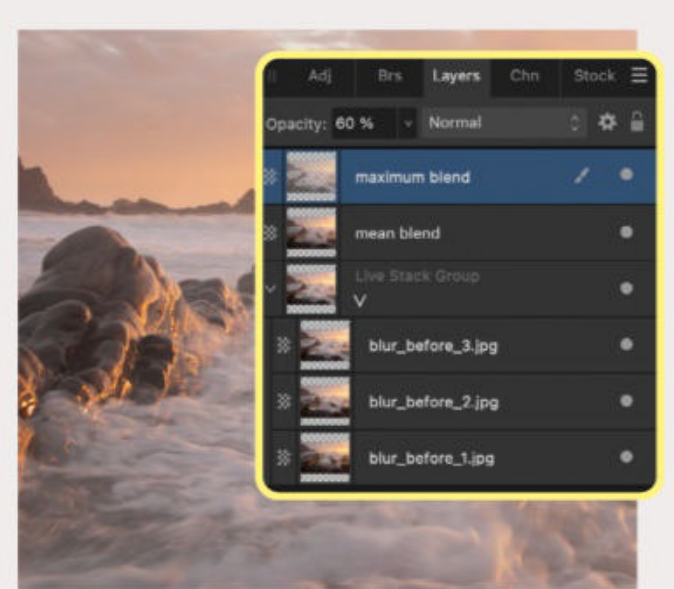
1 Load into a stack

Use the start files or your own set of rapid-fire water photos. Open Affinity Photo then go to File > New Stack. Click Add and find your images. Load them in. Check Automatically Align Images if you shot the sequence handheld or if there's movement between frames. Hit OK.



2 Set to Mean

Go to the Layers panel and you'll see a new stack group. Expand this to see all the images within. Click the small icon on the Live Stack Group. This gives you a list of blending options you can hover over. Mean, Median and Maximum work best for blending water. First set it to Mean.

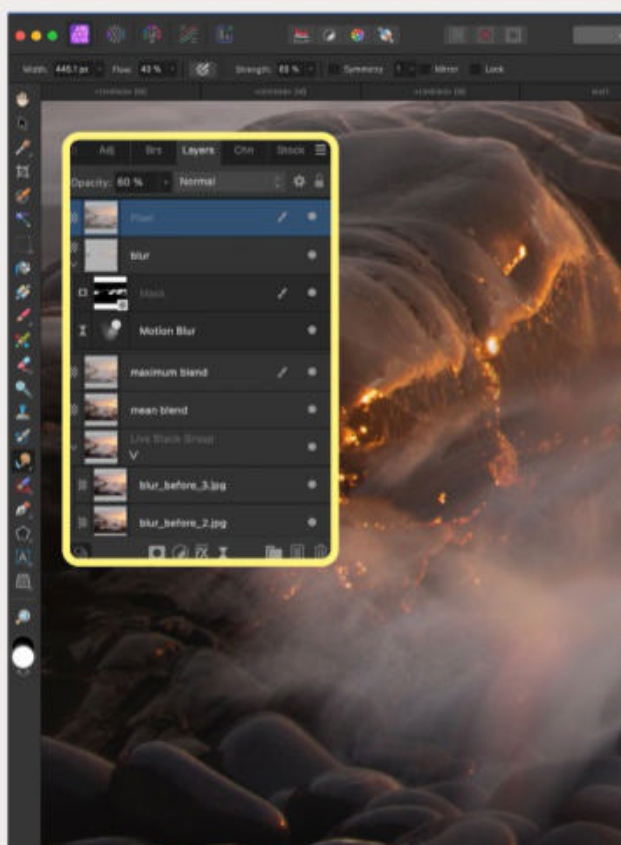


3 Merge twice and blend

Press Cmd/Ctrl+Shift+Alt+E to merge a copy of all the layers into a new layer. Hide the layer for now. Go back to the stack blending menu and set it to Maximum and again merge another copy. Experiment with layer opacity to combine the two merged layers for best results.

4 Add a blur filter

Hit Cmd/Ctrl+Shift+Alt+E to merge another copy, then go to Layer > New Live Filter Layer > Blur > Motion Blur. Click in the image and drag to the right or left to make a horizontal blur effect. Next click the Add Mask icon, then hit Cmd/Ctrl+I to invert the mask to black. Paint white to reveal the blur over the water.



5 Smudge the waves

Merge another layer with Cmd/Ctrl+Shift+Alt+E. Grab the Smudge tool and set the Flow to 40, Strength 70. Zoom in and use the tool to smudge the waves into blurred shapes that follow the flow of the water. Experiment with layer opacity to tone down the effect until it looks right.



6 Blend original details

Alt-click on the layer thumbnails of the three original images' layers in the stack to check if there are better samples. If so, duplicate the layer with Cmd/Ctrl+J, drag to the top of the stack then add a layer mask and paint black to hide all but the area you want.

Expert Tip



We've blended three frames of our coastal scene here, but you could take it a step further and blend tens or even hundreds. When shooting the moving water, set your camera up on a tripod and try using your camera's high-speed drive to capture a rapid sequence, or set up an interval shooting sequence that fires a set of images in quick succession, ideal for stacking.

BEFORE



AFTER



Project five: Adobe CC

Why Photoshop isn't the only game in town

Tidy up messy areas of your images in Camera Raw and Lightroom with **James Paterson**

Many of us who've been using Adobe editing tools for years find that there's less and less reason to open our images in Photoshop. Instead, Camera Raw and Lightroom offer almost everything we need to edit our images. But for precise retouching work, Photoshop has always been better – that's until now.

The latest updates to Camera Raw and Lightroom include a Content-Aware healing feature that could be a game changer for your Raw editing workflow. Content-Aware Fill lets you target an

object, then watch as Photoshop removes it. Now we can use the Content-Aware Remove tool in Camera Raw and Lightroom's Develop Module to reach similarly impressive results. So, if there's a distracting object or detail that you want to be rid of, you can simply paint over it.

Of course, it's not going to be perfect every time. But with the other tools in the Healing panel, you can usually tidy up without importing into Photoshop. Once done, you can finish the image with one of our 10 free winter-themed profiles.

Expert Tip



We've supplied 10 wintery profiles with your video. Import them into Camera Raw or Lightroom. In Camera Raw, go to the Basic panel, click the Profile Browser grid, click the three-dot icon and choose Import Profiles and Presets. The profiles will sync to Lightroom. Check the box and you'll see a black-and-white overlay. This seeks out edge details by dividing the image into high-frequency (white) and low-frequency (black) areas. The slider lets you fine-tune the divide. The overlay makes it easier to detect sensor spots; paint with the Healing Brush to remove them.

1 Content-Aware Remove

Open an image in Camera Raw (or in Lightroom, import the image and go to the Develop Module). You'll find the Healing Brush in the toolbar, or you can hit B. With Content-Aware Remove mode selected, paint over objects to remove them. It analyses the content and generates new pixels, based on the surrounding details, to fill the area. Here, it allows us to remove tourists pictured around the waterfall.

2 Source areas

After filling an area with the Content-Aware Remove tool, you may find that the first attempt isn't right. Hit Refresh to make the tool try again, or tap the / key. If this doesn't give you the results you want, hold Cmd/Ctrl and drag to make a rectangular box over part of the photo. This enables you to target a specific area for the fill, which can be handy when there isn't a large, clean area to sample from.

3 Clone and Heal

Alongside Content-Aware Remove, you'll find older but equally useful Heal and Clone modes. Clone works by copying pixels from the source area to the target area. Heal attempts to adjust colours and tones in the source area to match the target area. Both will create a Source point each time you target an area, although you can hold Cmd/Ctrl and drag when laying down the point, or drag the source point to a different spot.



4 Brush settings

The brush settings here let you set the Size, Opacity and Feather sliders for your brush tip. The Feather setting will determine how soft-edged the brush is. In general, it's best to use a high feather when cloning and a slightly harder feather when healing. A low opacity can be useful for cloning, especially when tidying up slightly messy fill areas, as it allows you to gradually blend pixels using a clean area nearby.

5 Useful shortcuts

Use the right mouse button and drag to resize the brush tip, or tap the] and [keys. Hold Shift and use] or [to change feather size. To heal in a straight line, click on one spot, hold Shift, then click another to make a line. Tap V (H in Lightroom) to toggle the overlay. Highlight a spot and hit Delete to remove it, or hold Alt and drag a box to remove several points. Hold Shift and tap the arrows to nudge a source point.

6 Visualize spots

This turns on an overlay that makes it easier to see sensor spots, especially in areas such as skies. The slider lets you fine-tune the edge details to see spots more clearly. Once you've fixed a photo, you can sync the edit to remove recurring spots from others. Open the entire set in Camera Raw, right-click and 'Sync Settings'. In the sync options, make sure that only Spot Removal is checked. **N**



Transform champagne flutes into works of art with vivid colours in a process that takes just minutes to set up.

Project six: The big project

Creative cross polarization

James Paterson uses cross polarization to create striking, spellbinding abstract colours

Many of us are accustomed to using circular polarizing filters on our lenses. They're useful for enriching colours in landscapes – especially blue skies and foliage – and invaluable for cutting through reflections or atmospheric haze. But polarizers aren't just for lenses. Something magical happens if we polarize our light source too. This is called cross polarization, and the technique is simple. We need both the light entering our camera and the light emitting from our source to be polarized light.

It's a classic technique that has many uses, both practical and creative. Cross polarization can result in photos with zero reflections and glare, which makes the technique useful for practical things like dental photography, because eliminating the glare allows for a clearer picture of the shape of a person's teeth. But if you want to get creative, it also allows you to capture otherworldly colour spectrums.

Captured under cross-polarized conditions, any hard, clear, plastic objects – like the plastic champagne flutes here – are transformed into vivid, rainbow displays of colour. This is a wonderful project to try at home, and you probably have everything you need to get started already. As well as a polarizing filter for your lens, you'll also need a polarized light source. Most LCD screens emit polarized light, so it's fairly easy to get set up in front of a laptop or, for more wiggle room, a large TV. The only other thing you need is an array of hard, clear, plastic objects and a surface to place them on, like a piece of Perspex or glass. It takes minutes to set up, but offers hours of spellbinding enjoyment with your camera. →

VIEW THE



VIDEO

www.bit.ly/np160cross

The set-up: Cross polarization USE THE POLARIZED LIGHT FROM YOUR TV FOR VIVID COLOUR SPECTRUMS IN CLEAR PLASTIC OBJECTS

1 Polarizing filter

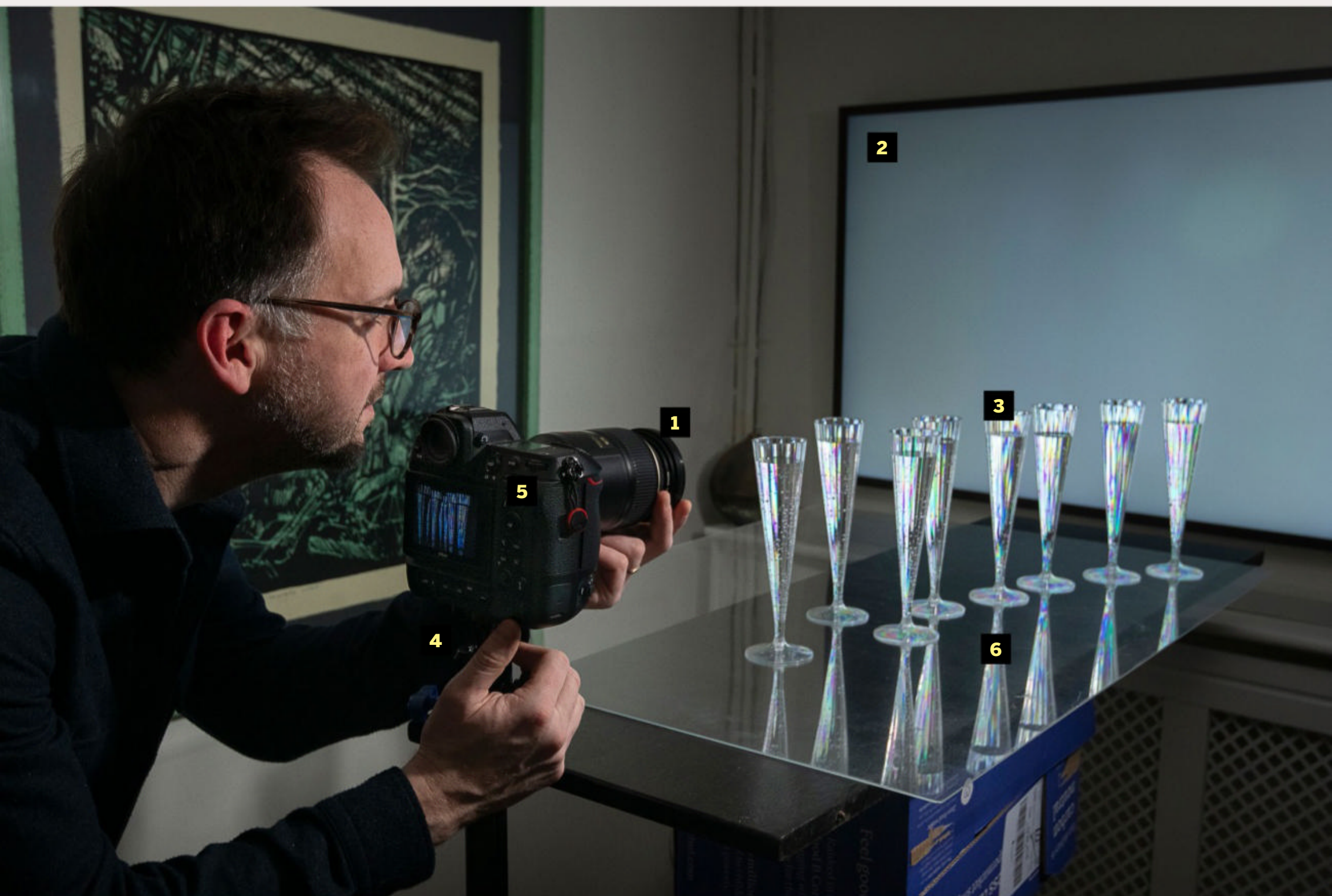
Attach a polarizing filter to your lens. You can use either a circular or linear polarizer. You might need to use step-up-rings depending on your filter size and the lens thread size (but don't worry if you can't screw on the filter, simply hold it in front of the lens). We used a 77mm B&W circular polarizer here.

2 TV screen

Most LCD screens emit polarized light. A TV is a good option as it gives you plenty of room to work with. If your TV has the YouTube app, simply search for 'white screen' and you'll find plenty of blank screen videos (or display a plain white JPEG). Increase the brightness of the TV for a stronger light.

3 Hard plastics

Clear, hard, plastic objects, like the plastic champagne flutes here, are ideal for this project. The cross polarization shows the residual stresses in action within the plastic as a vivid colour spectrum. Experiment with positioning the objects; a slight rotation can result in a different array of colours.



4 Tripod

A tripod isn't essential for this project but it is very helpful as it allows you to tweak the position of the plastic objects. It also allows you to shoot with a slower shutter speed without camera shake, which is handy if you want to use a low ISO and a narrow aperture for greater depth of field.

5 Camera settings

There's no right or wrong when it comes to exposure, so use whatever camera settings you're comfortable with. You might want to use exposure compensation to dial the light up or down to suit the subject. We're in Manual mode here with the shutter speed set to 1/10 sec, an aperture of f/8, and ISO100.

6 Reflective Perspex

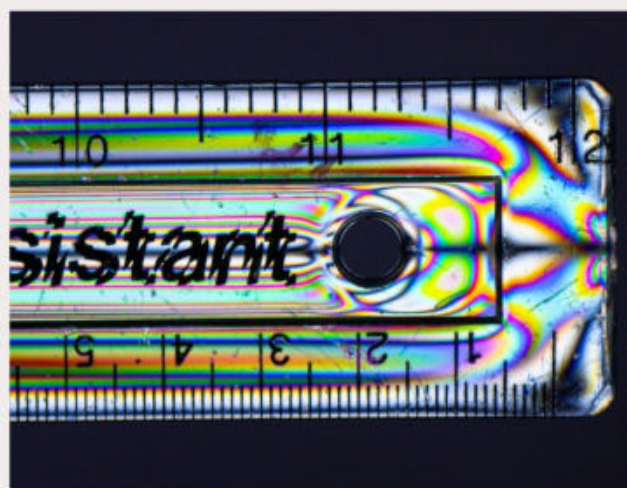
We've used a Perspex sheet placed on top of a black wooden board as a base for our cross-polarized still life. This creates an array of colourful reflections that adds to the vivid effect. Turn off any other lights in the room and close the curtains, so that the TV is the only light source in the shot.

Top tips for cross polarization photos



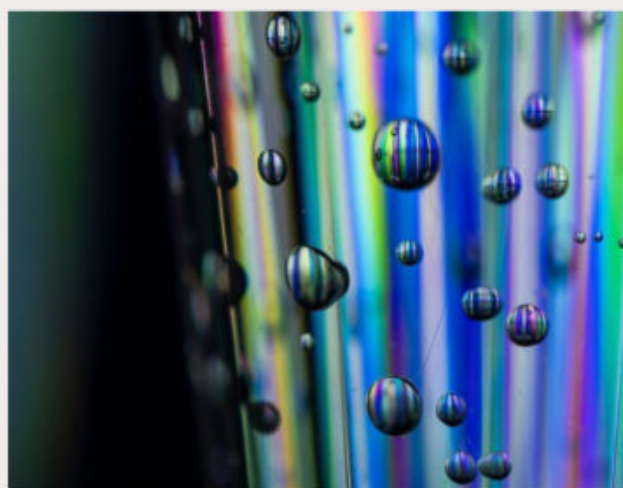
1 Choose white or black

One of the most magical things about the project is how the TV or laptop screen behind the plastics can be made either white, black or something in between, depending on the rotation of the circular polarizing filter. So try rotating the filter for a range of interesting effects.



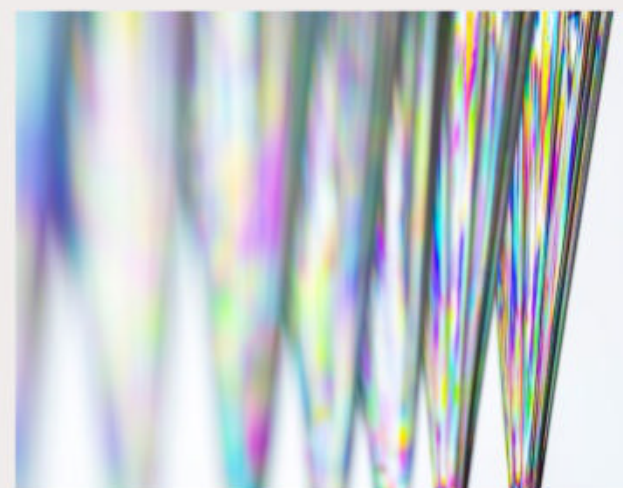
2 Use different plastics

Root around the house and you're likely to find all sorts of interesting objects that can be transformed into a vibrant still life subject, thanks to cross polarization. Arrange the objects so that the screen backlights them from behind and, if the plastic is suitable, you'll be treated to a colourful spectrum.



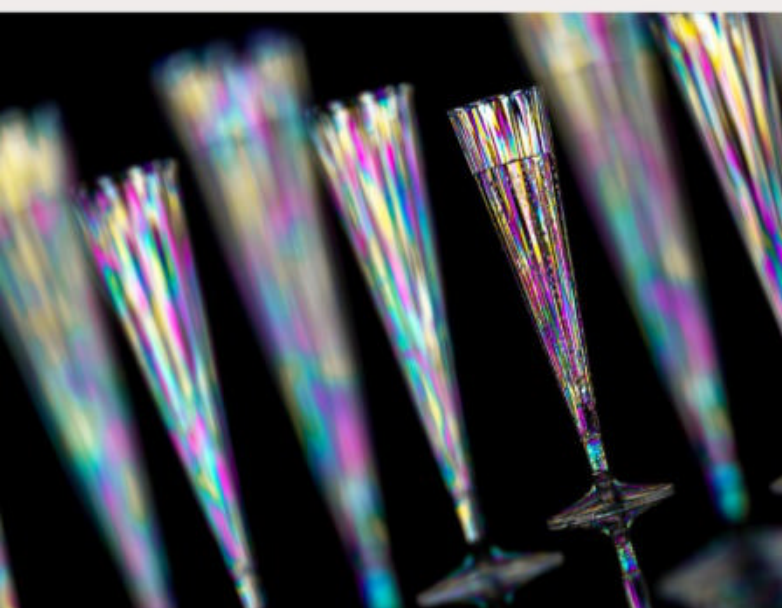
3 Try a macro lens

If you have a macro lens, this is a great time to experiment with extreme close-ups. Come in tight on parts of the plastic object, like the bubbles in the champagne flute here. Use a fairly narrow aperture, such as f/11, to expand your depth of field so that more of the close-up details are in focus.



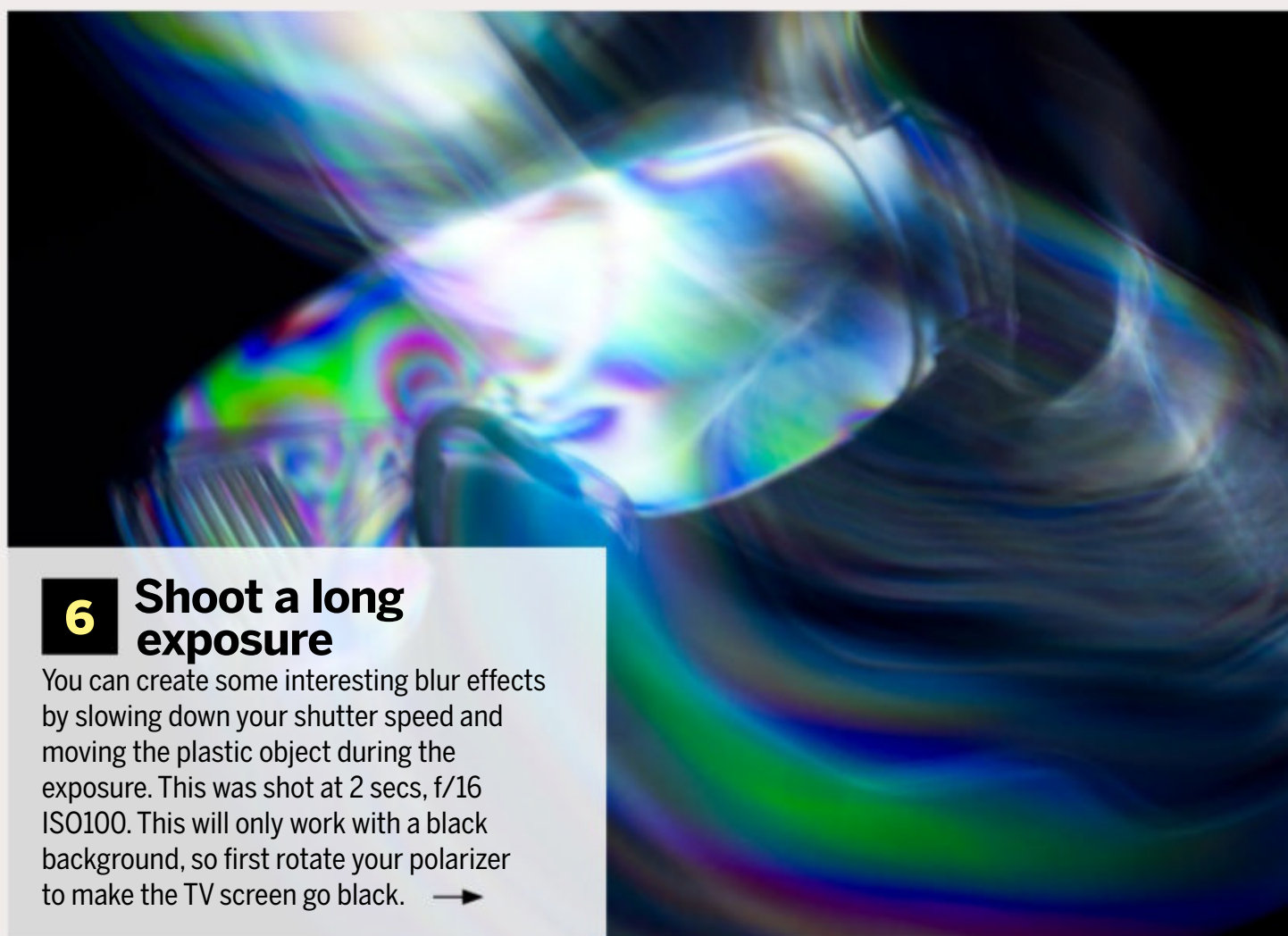
4 Create depth

The great thing about using a TV for your polarized backlighting is that – as long as it's a fairly large screen – you can arrange your plastic objects at different distances to create a sense of depth in your cross-polarized photos. Here, by focusing on the last in a line of flutes, we get lovely foreground blur.



5 Experiment with tilt

When capturing an array of similar objects like this it's worth experimenting with pattern-like arrangements, perhaps by spacing them all at equal distances. Try tethering your camera to a laptop or your phone to help you arrange things. Once done, an intentional tilt to the camera can lead to a dynamic composition.

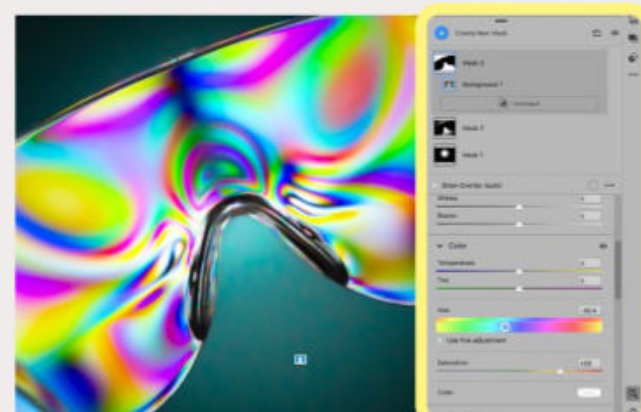
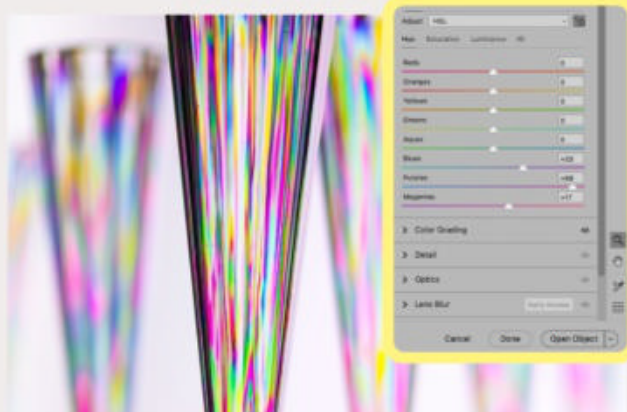
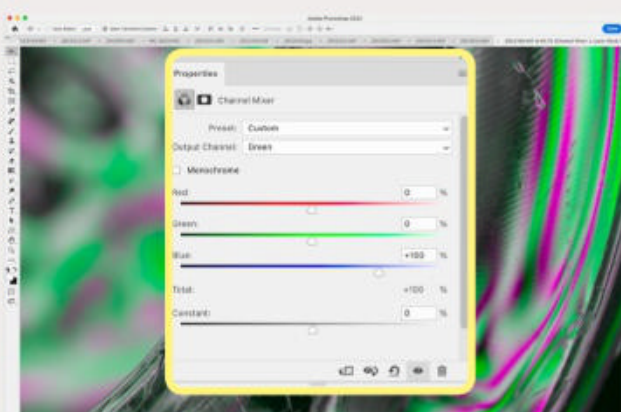


6 Shoot a long exposure

You can create some interesting blur effects by slowing down your shutter speed and moving the plastic object during the exposure. This was shot at 2 secs, f/16 ISO100. This will only work with a black background, so first rotate your polarizer to make the TV screen go black. →

Colour-boosting tips

OUR TOP TECHNIQUES FOR SHIFTING AND PERFECTING YOUR COLOURS IN PHOTOSHOP



1 Get creative with Channel Mixer

Photoshop's Channel Mixer adjustment layer is great for creative colour shifts. Use the dropdown to target the R, G and B channels and experiment with values. As a rule of thumb, the combined value for each channel should be around +100 for best results.

2 Use the Color Mixer

The Color Mixer panel in Camera Raw/Lightroom is one of the easiest tools for making colour changes. Go to the Hue tab then grab the Target tool and drag over colours in the image to alter them. Adjust the Saturation if colours are too strong or weak; for more control, experiment with the Point Color options.

3 Colour the backdrop

A twist of your circular polarizer can turn the background completely white or black. But something in between will give you a grey that can be colorized with ease. Open into Camera Raw or Lightroom, go to the Mask panel and choose Select Background, then use the Hue control to alter the colour.

Get crafty with cross polarization

CUT OUT PAPER SHAPES AND COMBINE THEM WITH PLASTIC OBJECTS FOR CREATIVE RESULTS

Start to experiment with cross polarization along with other creative techniques and you can come up with all kinds of interesting artwork. For instance, why not try combining the cross polarization technique with a bit of craftwork? For this image we cut out a few shapes from a sheet of black paper, then stuck them to our board of Perspex (now placed vertically and held in position with a clamp). We then stuck a pair of plastic goggles to the board, and experimented by placing other plastic objects very close to the camera lens to create blurry, out-of-focus colours in the foreground. Of course, the TV screen needs to be captured as white for this to work, so we need to rotate the circular polarizer on the lens until we have a bright backdrop, rather than a dark one. **N**



Subscribe to *Golf Monthly* for **great savings**

golfmonthllysubs.co.uk

THE BIGGEST NAMES

Your favourite
golfers in
every issue

YOUR 2024
CHECKLIST

Drive it better • Chip it closer • Think smarter

INSIDE
NEW DESIGN
NEW
FEATURES

GOLF

MONTHLY



25 WAYS TO PLAY BETTER IN 2024!

Your best year awaits

NEW YEAR
NEW GEAR!

- PING G430 MAX 10K DRIVER
- CALLAWAY PARADYM AI-SMOKE RANGE



Ernie Els exclusive
The Big Easy reveals all
Golf ball rollback
What it means for you

FEBRUARY ISSUE (10 JAN-14 FEB) £5.99



JOIN THE DEBATE

In-depth comment
on golf's **biggest**
talking points

PLAY BETTER GOLF

With help from Golf
Monthly's **Top 50**
Coaches

THE BEST NEW GEAR

Keep up to date with
the **hottest new**
products

PLAN A GOLFING GETAWAY

Our experts travel far
and wide to provide
inspiration for
your next trip

MORE WAYS TO CONNECT



GOLFMONTHLY.COM

Clive Mason

As Getty Images photographer **Clive Mason** gears up for another Formula 1 season and the Paris Olympics, he speaks to Keith Wilson about the highlights and lucky breaks of a career stretching back more than 30 years...



Clive Mason Profile

- A Nikon Europe Ambassador, Clive Mason has been a sports photographer for Getty Images and formerly Allsport since 1994.
- During this time, he has covered the past five Olympic sailing regattas (soon to be six), and more than 400 Formula 1 championship races.
- Clive has also photographed numerous Premier League matches, rugby, cricket and football World Cups and every Winter Olympics between 2002 and 2018.
- In 2020, he was named Sports Photographer of the Year in the Sports Journalists Association Awards, and won first prize for the Sports Picture of the Year.
- During his time with Getty, Clive has worked extensively with commercial clients including Nike, FIFA, Adidas, UEFA, Heineken, Red Bull Racing, Formula 1 and the International Olympic Committee.

www.clivemason.com

All images: Clive Mason

W

hat does a Voigtlander camera, Napoleon and a giant tortoise have in common with Formula 1 photographer Clive Mason?

The answer lies in a story from Clive's childhood when

describing how he got into photography. He said, 'My father was an incredibly keen amateur photographer and while he was working in the Foreign Office we had this dreadful posting to St Helena, where Napoleon died in exile.'

A British Overseas Territory in the middle of the Atlantic Ocean, St Helena is one of the world's most remote islands. As Clive recalls, back in the 1970s, there wasn't much for the islanders to do for leisure. 'There was no TV, there was nothing, just the BBC World Service and that was it.' Unsurprisingly perhaps, photography quickly became a shared passion between father and son on the remote outpost.

Clive continues, 'We took this picture on my dad's Voigtlander of a giant tortoise called Jonathan, who lived in the Government House grounds. We had our own little

darkroom in our house and we printed it, and that was my first ever photograph of this giant tortoise.' Jonathan, who is believed to have hatched in 1832, is officially the oldest living land animal on Earth.

Clive is keen to go back and photograph him again 'to bookend my career' as he puts it. 'That is where my interest in photography began, so when my dad died in 1977 – I would have been 10 – then that was all I wanted to do, to become a photographer.'

It might have been something of a slow start, photographing the ponderous gait of a giant old tortoise, but things have certainly sped up since then for Getty Images' premier Formula 1 photographer...

How did your interest in sports photography originally begin?

That would have been when I started freelancing for the *Northampton Chronicle and Echo*. You'd work all week and when you got to the



I ended up getting into sport because it was the most challenging thing to photograph

Previous page: Carloz Sainz of Spain crashes his Ferrari SF-23 during practice for the Abu Dhabi F1 Grand Prix, November 2023.

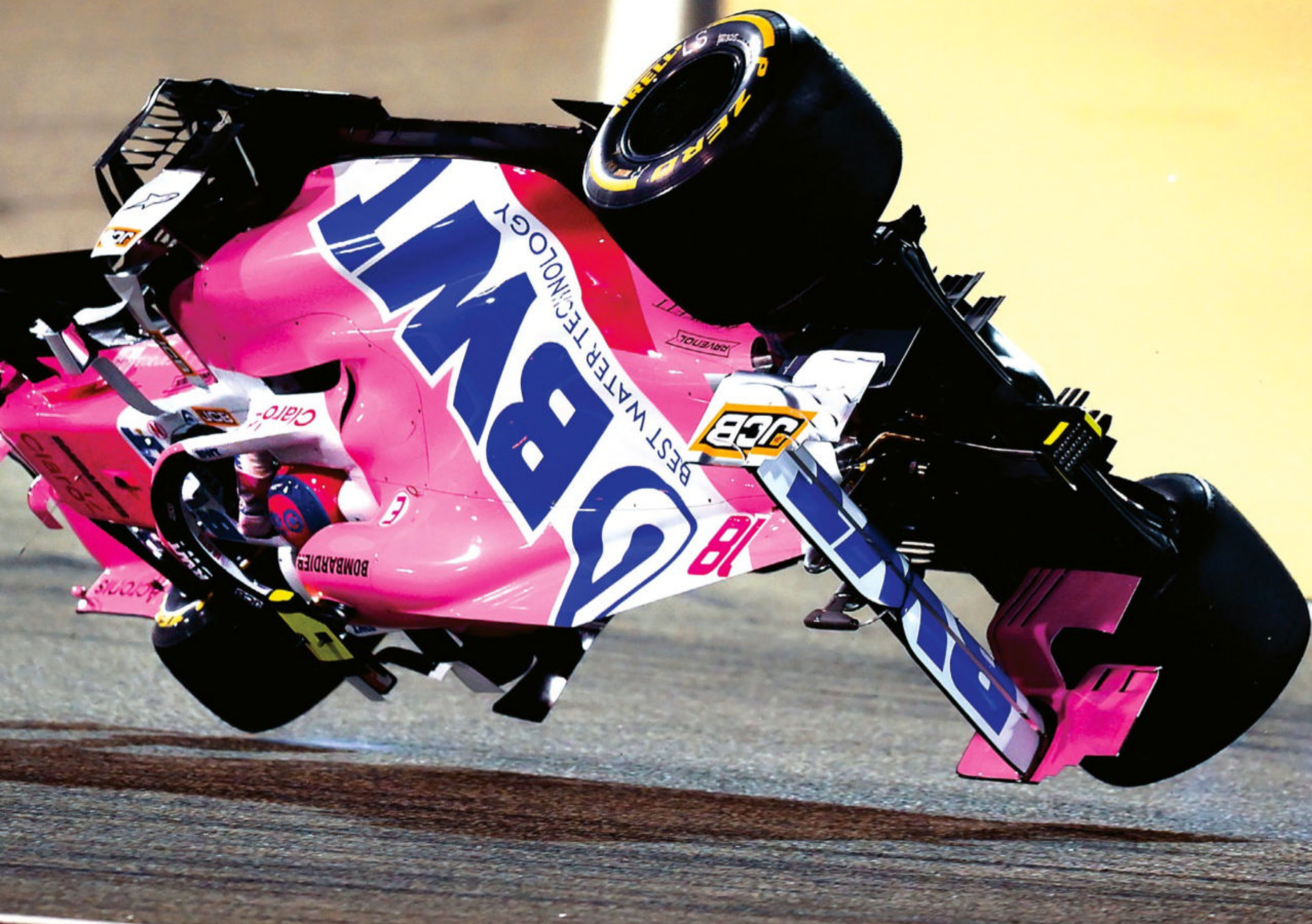
Below: Sparks fly behind Max Verstappen's Aston Martin Red Bull Racing RB16 during practice at the Bahrain F1 Grand Prix, December 2020.



weekend, the old boys would be reluctant to cover the rugby, the football or the cricket, so I'd say, 'I'll go, I'd love to have a go at that.' That's how it all began – because they didn't want to do the sport!

Does Max Verstappen's current dominance of Formula 1 dampen the interest for you, from a photographer's perspective?

Once the title's done – and it was decided in Qatar with five or six races to go – you can look at it in two ways; if you were an ardent F1 fan, you'd think, 'Oh, this is absolute rubbish, there's no point watching it,' but photographically it frees you up to be more creative because you don't have to worry about the pressures of recording a world championship tussle, so in a way I quite like it.



Does that influence the photographs you take?

Obviously, you always have client pressure to provide imagery and if something dramatic happens they still want it, and it's still interesting because as Verstappen went on, every race he won was a new record. I'm not a fan, I'm a photographer. My interest in sports photography is the photography side of it and the sport is secondary. I ended up getting into sport because I found it to be the most challenging thing to photograph. You only get one chance. I liked that buzz when I was younger and that's how I got into it.

You've mastered shooting many sports, but is there a favourite?

It would be wrong of me to say that F1 wasn't up there because I've →

Above: The Racing Point RP20 Mercedes of Canada's Lance Stroll flips during the 2020 Bahrain F1 Grand Prix. A 1/1250 sec shutter speed froze the crash with all four wheels above the track.

* WHAT'S IN THE BAG?

WITH ANOTHER FORMULA 1 SEASON ABOUT TO START AND AN OLYMPIC GAMES IN THE SUMMER, CLIVE WILL BE USING A LOT OF GEAR IN 2024...

Clive Mason's Nikon kit list

- 3 x Nikon Z 9 camera bodies
- 1 x Nikkor Z 100-400mm f/4.5-5.6
- 1 x Nikkor Z 28mm f/2.8 SE
- 1 x Nikkor Z 24-70mm f/2.8
- 1 x Nikkor Z 600mm f/4 TC
- 1 x Nikkor FTZ II lens adapter
- 1 x Nikkor Z 70-200mm f/2.8
- 1 x Nikkor F 105mm f/1.4
- 1 x Nikkor Z 14-24mm f/2.8
- 1 x Nikkor Z 85mm f/1.2
- 1 x Nikkor Z 400mm f/2.8 TC



- 1 x Nikon SB-5000 Speedlight
- 1 x Nikon TC 1.4X teleconverter
- 1 x Apple MacBook Pro 16in

THE N-PHOTO INTERVIEW

seen a lot and accomplished a lot through F1, but I love photographing sailing. That is my real happy place. Getty Images doesn't have many clients in sailing. The only chance I get is at the Olympics, and one or two little regattas. I don't have any huge sailing knowledge but when I'm out there I feel I'm most challenged as it's a really hard thing to shoot well because of the movement of the boat and long lenses.

It sounds exhausting!

It is exhausting, in fact, it is 100% exhausting! That's why I say I find it to be quite a challenge and that's why I get such a buzz from it. With the Olympic classes, essentially it is dinghy sailing that I photograph. They're small boats and you're a long way off handholding 600mm lenses all day trying to get close-in action shots. Whereas if you're shooting the start of those big round-the-world yacht races, you're amongst them on little ribs so you're alongside them with 24mm lenses because it's all about the grandeur of the boat. The difference is quite dramatic in the way you approach the two. But Formula 1 has been really good to me and I am probably known more for my Formula 1 than anything else.

Can you remember when you shot your first Formula 1 race?

I did my first F1 race for the *Chronicle and Echo* because, being based in Northamptonshire, it was home to the Silverstone circuit. Again, the older guys, who were probably the age I am now, weren't that keen to cover it, so I got a pass in 1988 or '89, the era of Mansell, Prost and Senna.

2024 is a big year because we've got the Paris Olympics and it also marks your 30th anniversary since joining Allsport and, ultimately, Getty Images.

June, I think it is. That's a big milestone for me. I'm still plugging away and, with my generation, you think you can do more than you probably can! You're competing with these kids and the tough thing now is they're fitter, they're younger, they're learning by what we've already done.

True, and the technology available today is totally different...

Now, you can click on an image and you can see all the file data, so



there's no more guessing 'how did he do that?' They know the lot, they know what camera, what time of day, it's probably geotagged somewhere, they can work it all out and they can go and stand in the same place. We had to do the hard yards; colour neg, black-and-white neg, you never knew what you had until you got back and you learned by your mistakes. Now, you can make whatever changes immediately. It's easier now.

Good point, but you have benefited in the second half of your career from the digital technologies too.

Yes, I made the switch during the Allsport years. The first major event that was fully digital was the Athens Olympics in 2004. Up till then, we had dabbled. I did a cricket tour in New Zealand and they flew this camera out to me. It was a right dog of a camera and you had to plug it in with those big SCSI cables.

How did you find the technology transition in those early days?

I had this laptop, which was a monitor, and you had to link a cable



I love photographing sailing. That is my real happy place

Above: This 'half and half' image, taken with a Z 9 and 14mm lens in an underwater housing, shows British kite surfer Eleanor Aldridge in action prior to a Paris Olympics sailing test event at Marseilles Marina, July 2023.

Above right: Singapore's contestants in the Women's 49er FX skiff race are silhouetted against the evening sun during a test event for the Paris 2024 Olympics.

Right: Clive calls sailing his 'happy place' and enjoys the time it offers for more creative photography, as his image from the Nikon D6 launch demonstrates.

and nobody told me that, when I got this digital camera, it would be like 2.5x magnification, so a 600mm lens became unusable. I shot cricket with a 70-200mm on this beast of a camera and it was absolutely dreadful. That would have been 1997 or '98. I remember that being the forerunner, when I first laid hands on a digital camera.

What are the events that will you be covering at the Paris Olympics?

Sailing. I've been doing it since Athens in 2004. Back then, I had an accident the night before the opening ceremony and cut my face open. They said we can fly you home if you want and I said, 'No, I'm staying.' I suggested doing the sailing because no one really wanted to do the sailing, so I did the sailing for the rest of the Games and, being out on the water, the salt water meant I came home completely healed. My wife said, 'I thought you said you were injured!' I had 18 stitches but that was the start of my Olympic sailing career.

Where will the sailing be this time?

For the Paris Olympics, the sailing will be in Marseilles. There will be a couple of other guys down there because there's a football stadium and there will be football too, so I might end up doing a football match one evening as well. →





Your sailing pictures include split-level images. Where do you get your ideas?

The split-level thing is obviously not my idea, it's been around for a while, but it's something you can't do during competition because you would never be that close to the boats. A lot of it is in the start box when they're driving for position, and if you're on the edge of the start box and someone comes past you, you've got to be ready to drop your camera with the 600mm down and plunge your split-level camera with housing underwater.

Formula 1 and Olympic sailing are very different sports, but do you pack similar gear for both events?

All bar a split-level housing, pretty much. You even need the 600mm now for America's Cup sailing because they want you 500 to 600 metres off the mark as those yachts are so fast and so dangerous.

Many Formula 1 photographers use 400mm f/2.8 lenses because they want to shoot another stop wider, but you can't maintain movement in the wheels because if you shoot at f/2.8, even at the lowest ISO you are still going to be shooting at 1/2000 sec, so it tends to freeze the wheels. On street circuits, the 600mm can be a bit too long as the run-off areas aren't that great, whereas on some of the purpose-built tracks the 600mm is too short.

What equipment will you be packing for the Olympics?

I will have my 600mm but they're trying to get me to use this new



There's nothing nicer than a prime lens, wide open, full frame

Above: Race winner and F1 champion Max Verstappen of The Netherlands performing doughnuts on the track with his Oracle Red Bull Racing RB19 at Abu Dhabi, November 2023.

180-600mm zoom. I reckon zooms are never as sharp as a prime lens, but if all you shot with was a 180-600mm, you'd say, 'Yeah, that's sharp.' A zoom can be handy and I like the new 100-400mm zoom on the Z cameras. There will be whatever lens I choose for the split housing – one day it will be the 14mm fisheye, another day the 16-35mm, which is a bit more natural. In my Pelican case out on the water there will be three bodies, three lenses, the 600mm, the 400mm and probably a wide-angle and then an ultra-wide in the housing.

Are the Nikon camera bodies you use all the same models?

All Z 9 bodies. I don't have a Z 8 yet. To be honest, it would be a bit of a luxury if I did have a Z 8 because I'm happy with the Z 9. I did the test event for the Olympics in Marseilles in August 2023 and Aquatech gave Getty one of the first Z 9 housings.



It was a pre-production sample, there were a few issues with it, but it was 99% there. Now, it has been tweaked and it's the perfect thing.

What was your first Nikon?

The F3. That was when I was at the *Chronicle and Echo*. It's a classic camera. I always wanted the F3 Titanium but never got around to having one and then I drifted off to Canon. I have ebbed and flowed over the years with gear and it's primarily been led by which manufacturer at the time had the best option. I went back to Nikon when the D3 came out with the full-frame sensor and, at the time, Canon's offering was a cropped sensor. There's nothing nicer, as we all know, than a prime lens, wide open, full frame.

How has the technology helped you develop creatively?

It's helped everybody in every walk of photography because you're learning



HITCHING A LIFT

CLIVE RECALLS AN UNUSUAL INCIDENT AT THE BRITISH GRAND PRIX THAT LED TO ONE OF HIS FIRST PUBLISHED F1 PICTURES...

Any very special photos from your early F1 days?

The picture that I remember from very early on was when Ayrton Senna broke down on the cool-down lap at Silverstone. Nigel Mansell picked him up and he sat on the car, and you've got them coming around on the last corner. That was on an old black-and-white neg. I was still working for the *Chronicle and Echo* and that was my first significant moment that I photographed in Formula 1. That would have been 1991 or '92. I've still got that print but not the negative. It's a precious print.



instantly, being able to see what you've shot, especially with slow shutter speed shots. There's a couple of Formula 1 shots that I've done over the years that I still can't replicate to this day. I mean, I know how I did it but for the life of me I can't nail it as well as the first time.

How do you mean?

It was a one second long shutter speed and it's all to do with following the car as accurately as you can and in your head thinking, 'right, the car has had over 50% of the one second, and then moving it in order to create the blurs, but you've got to give it enough time that the car is recorded with enough detail, otherwise the car disappears as well. Sometimes it works and sometimes it doesn't, but it's never worked as well as I did it the first year.

How did you get your first sports shoot on the *Chronicle and Echo*? I bet it wasn't the British Grand Prix!

When I was very young, the picture editor said to me, 'Are you interested in photography?' And I said, 'Yeah,

I am. I'm really interested', and he said, 'What do you like to do?' and I said, 'Well, I really like to shoot sport', and he gave me a box of 20 rolls of Ilford HP5.

That was generous of him...

At the time, I thought, 'Gosh, you've given me all that!' I lived near a local park and there was Saturday and Sunday football, and I sat there with my Tamron 300mm and my F3 and I plugged away. I then went back to my garage darkroom and processed the film and showed him the next day and he said, 'Right, I want you to shoot Northampton Town versus Halifax for me.' It was Division 4, and I went, 'What? League football, you want me to shoot a game of league football?' and he said, 'Yep, you're good enough, you understand the game', and I went into this ground thinking, 'I've made it!' My ultimate goal was to be a sports photographer and I was shooting league football.

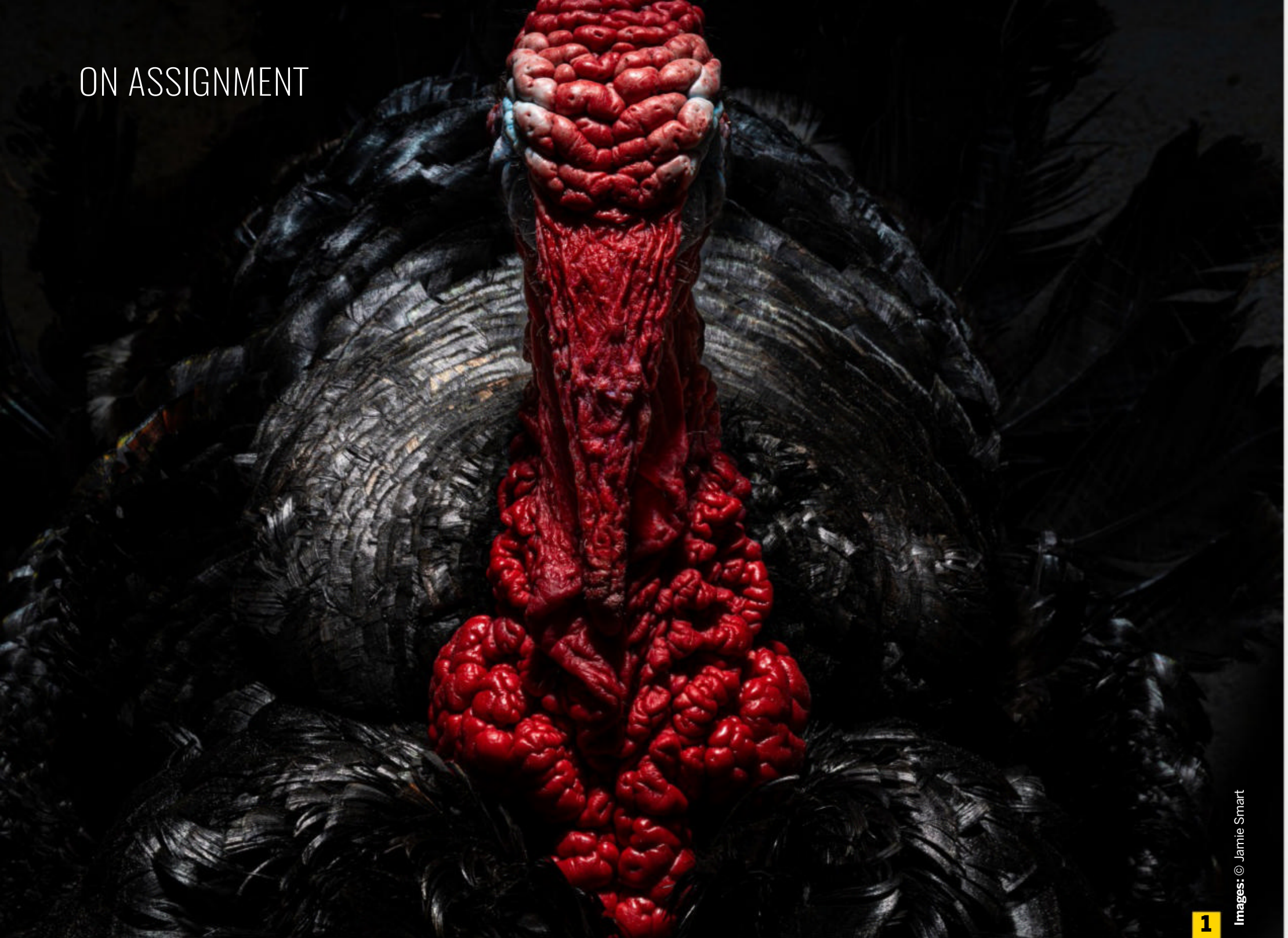
You've come a long way since.

Little did I know at that time that I would go on and shoot World Cup finals and Euros and Olympics and over 400 Formula 1 races, but at the time I remember being so elated that this guy had trusted me and given me a box of film. People today still don't understand how special it was – I used to buy film a roll or two at a time and every frame was precious, so a box of film was like, 'oh, my God!' Life is a series of lucky breaks.

What would your single best piece of advice be for someone wanting to become a professional sports photographer?

You've got to make contacts and learn from what people have done. Look at pictures – if you want to go into sport, look at the Getty Images website and look at everything that's being done on a daily basis. Look at what's out there and aspire to be the best. There's so much quality imagery out there, so hunt it out. Anyone who doesn't want to hunt it out doesn't really want to do the job. I used to buy newspapers and look at Chris Smith, Eamonn McCabe, David Ashdown, Bob Thomas; looking at their work was how I learned. Only by comparing yourself with the best in the industry can you aspire to be the best in the industry. ■

Next Month
Wedding, fashion
and portrait
photographer
Brett Florens



Images: © Jamie Smart

1

Talking turkey



At eight years old, **Jamie Smart** is the youngest ever winner of the prestigious RSPCA Young Photographer Awards, along with her pet turkey

I entered the RSPCA Young Photographer Awards again this year because I loved the competition so much last year. I remember leaving the ceremony at the Tower of London and saying to mum and dad: "I want to win this one day!" And with that

I set myself a challenge and goal to try to capture images that would be good enough for me to have a chance.

The idea of photographing our turkey Frederick came to me while I was wandering around my garden with my camera just looking for things to photograph. I spotted him in his pen looking at me through the

bars – he was being kept inside because of bird flu. He had a curious look in his eyes so I thought I'd try to get a different image of a turkey while he was standing there looking at me... this is where the photo of him came about and was also the idea for the portfolio of a turkey. I wanted to do something different and unique with the portfolio of the turkey as people overlook turkeys.

Fred is great, he is quite tame and I enjoy spending time with him, so I thought I'd try to capture the beauty of his feathers by using a macro shot to show-up their iridescence. I also wanted to get a real detailed photo of the caruncles on his face and neck. They were particularly red and puffed up, so I asked dad to help hold a flash

up for me in his pen while I tried to get the photo of him square on – it was tricky as he would not stay still! And I had to adjust my f-stop and shutter speed quite a bit to finally get the image I wanted.

I've used Nikon from day one because that's what dad James has. He has used Nikon over many years as he enjoyed photography as a hobby. At the moment I shoot with Nikon Z 9 body and various lenses depending on what I'm looking to capture and where I am. For the photo of Frederick, 'Not Guilty', which won the overall prize, I used a Nikon Z 24-120mm lens with a Nikon SB-910 Speedlight... and dad as a flash holder!

For the horse photograph, I used a Sigma 150-600mm lens, and for the caterpillar image I used the Nikon Z MC 105mm f/2.8 macro lens with the Nikon SB-910 Speedlight. I took the 'Turkey Eye' picture



I wanted to do something different and unique with the portfolio of the turkey as people overlook turkeys



2



3



4



5

[1] When an outbreak of bird flu confined Frederick to his pen, Jamie shot her 'Not Guilty' competition-winning image.

[2] Jamie used her macro skills to impress the judges when a caterpillar arrived in the kitchen.

[3] A brief break in the clouds and a curious horse come together on Welsh moorland.

[4] Contrast and tight framing form a compelling image.

[5] Jamie receives her RSPCA Young Photographer Awards trophy from naturalist and TV presenter Chris Packham.

with dad's Nikon D500... I didn't start with a Z 9! As I got better, dad trusted me with his newer camera – the D850. We then sold old kit and saved up to get the mirrorless Z 9, which made a massive difference when taking photos of wildlife as it is so much quieter and faster.

Call of the wild

I love nature and wildlife and this is all the inspiration I need to take photos. My mum and dad give me as many opportunities as possible to get out into the wild. We do a lot of research on where to find certain birds and animals and what type of habitat they are likely to live in and when.

We get up early to go to places to try to find them. We like to travel a lot around Wales and have started going a bit further afield into England. Lots of times I don't manage to get the photo I want or I miss the bird or animal altogether. But that makes the time that I do get it right that much more amazing. I like to live by Bear Grylls' motto – 'never give up'.

I was so chuffed at winning the Pet Portrait category last year that I started taking more photos straight away when we got home! There's a group of horses on the moorland near where we live in Wales, and we went up there late afternoon on a pretty rough day. As the sun was setting, the clouds parted for just a few minutes and lit

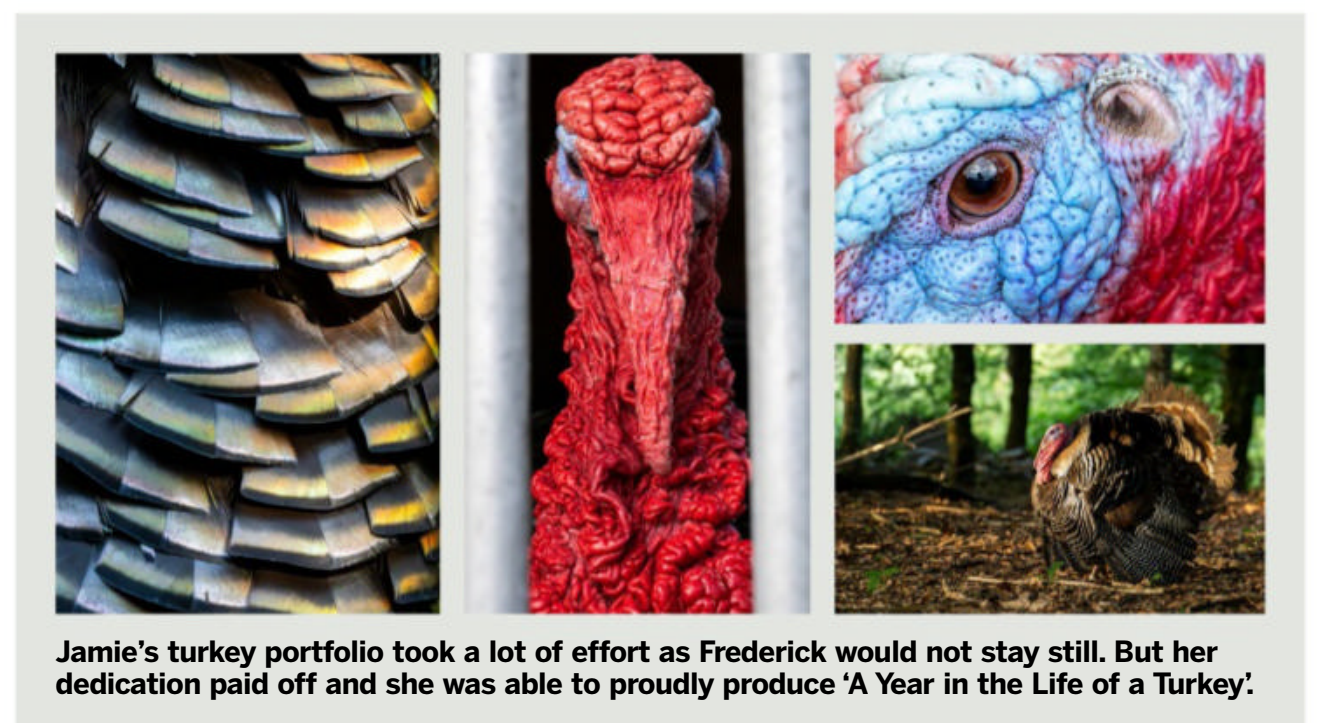
up the herd. This beautiful animal looked across at me with this sort of curious look about him... so I decided to call the image 'Curious George'.

The 'Head Underwater' shot of the swan was commended in the Under-12 category. I took this while I was trying to get a photo of the water droplets coming off the beak as the swan lifted its head out of the water. I didn't manage to get that photo but I did capture this image.

The 'Staring at the Sun' image, of the caterpillar, was commended in the Small World category. He dropped out of a

cabbage onto the kitchen worktop and crawled his way on to dad's phone. I loved playing around a bit with different shots while he was crawling around. 🍷

This year is the 200th anniversary of the RSPCA, so the Young Photographer Awards 2024 is set to be bigger and better than ever. Anyone under 18 can enter, with categories including age categories, the macro of Small World and showcasing Pet Personalities. Entries open in May. For more, visit: <https://young.rspca.org.uk/ypa/home>



Jamie's turkey portfolio took a lot of effort as Frederick would not stay still. But her dedication paid off and she was able to proudly produce 'A Year in the Life of a Turkey'.

NIKOPEDIA

The only camera manual you'll ever need...

70 Nikon Know-How Get to grips with shutter speed for sharper shots

74 Ask Matthew More words of wisdom from our Nikon know-all



THE NEED FOR SPEED!
An understanding of shutter speed and movement will help you stop your subjects sharply in their tracks.

NIKON KNOW-HOW

Why shutter speed matters

Using the correct settings is key to getting sharp shots and creating blur

Are you paying enough attention to your camera's shutter speed? Or do you just check it's fast enough to avoid the risk of camera shake and then ignore it?

Photographers work very hard to get their subjects perfectly sharp and to create just the right degree of background blur. But it's a mistake to imagine that focusing and lens aperture are the only controls that count. In fact the shutter speed plays an equally important part in controlling sharpness. The aperture can control the sharpness with depth, but the shutter speed does the same thing with another dimension – time.

If you're photographing an object that's still, the shutter speed may not be a factor, but most everyday subjects show some kind of movement, and this is where the shutter speed becomes important.

FREEZE OR BLUR?

For action or sports photography, you might want to freeze your subject to eliminate any movement from your images. When you are working out what shutter speed is needed, many factors come into play, such as the speed your subject is travelling at, its distance and the angle that you are shooting from.

For some challenging subjects, such as a speeding racing car, there may not be a high enough shutter speed available. That's why action photographers 'pan' with the subject to keep it centred in the frame. It's the subject's speed across the frame that causes the blur, not its speed in real life, and following your subject in the viewfinder is the secret to achieving pin-sharp shots.

RELATIVE MOVEMENT

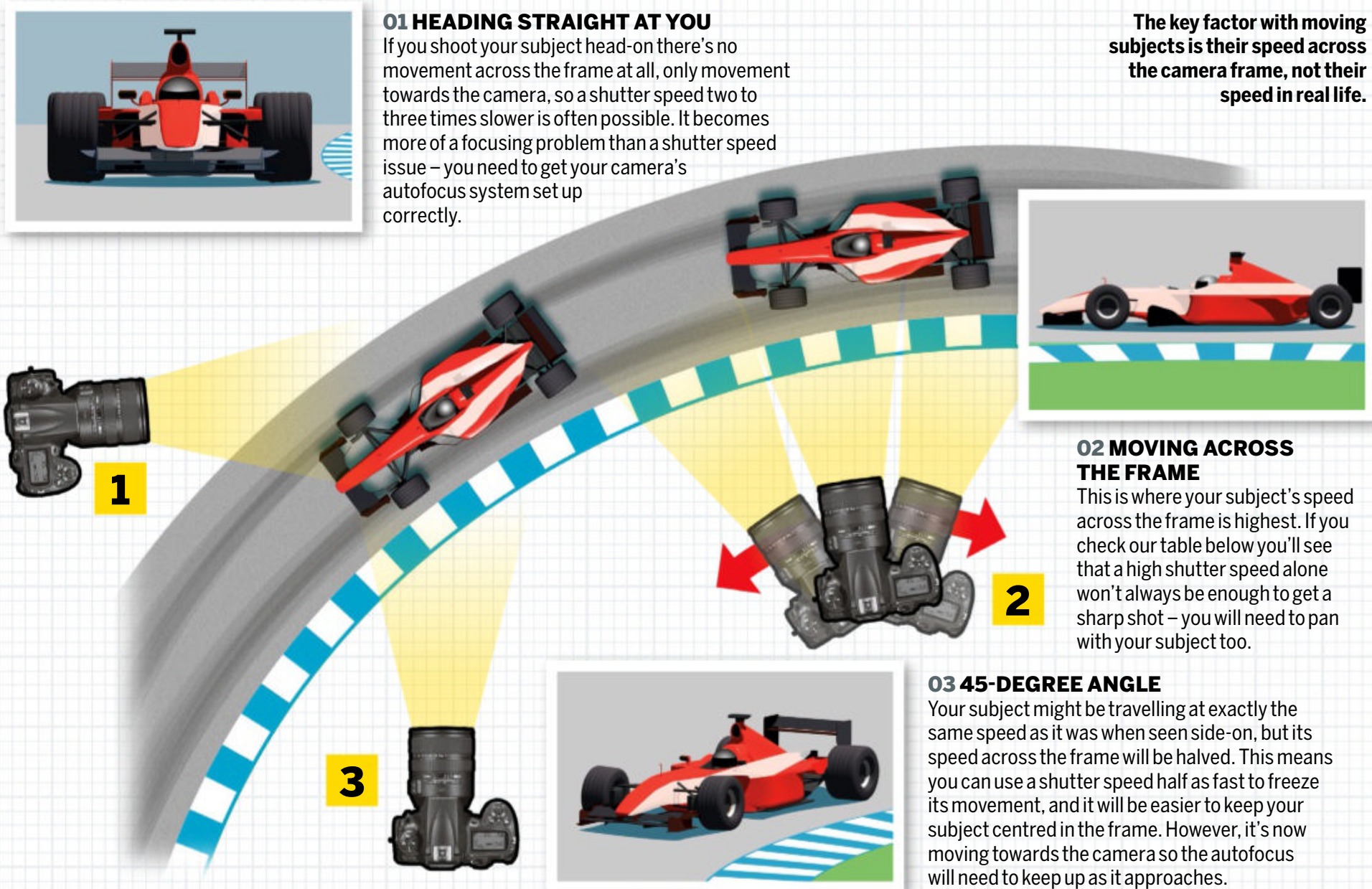
When you take a panning shot, it's the background that comes out blurred, and this is just one example of a situation where you can use relative movement for powerful creative effects.

Waterfalls and seascapes are other classic examples. A slow shutter speed is used so that the water turns into a milky blur – but the rocks and cliffs don't move during the exposure, so they stay completely sharp. You can use the same techniques to blur pedestrians walking across 'the set' when you're shooting busy scenes for travel shots.

Don't just treat the shutter speed as a routine adjustment to prevent camera shake – it's an important creative tool in its own right. **N** →

How to freeze a fast-moving subject

It's not just the subject's speed that counts, it's your position and shooting angle



01 HEADING STRAIGHT AT YOU
If you shoot your subject head-on there's no movement across the frame at all, only movement towards the camera, so a shutter speed two to three times slower is often possible. It becomes more of a focusing problem than a shutter speed issue – you need to get your camera's autofocus system set up correctly.

The key factor with moving subjects is their speed across the camera frame, not their speed in real life.

02 MOVING ACROSS THE FRAME
This is where your subject's speed across the frame is highest. If you check our table below you'll see that a high shutter speed alone won't always be enough to get a sharp shot – you will need to pan with your subject too.

03 45-DEGREE ANGLE
Your subject might be travelling at exactly the same speed as it was when seen side-on, but its speed across the frame will be halved. This means you can use a shutter speed half as fast to freeze its movement, and it will be easier to keep your subject centred in the frame. However, it's now moving towards the camera so the autofocus will need to keep up as it approaches.

TAKE CONTROL

Speed is everything

Sharpness depends on just how far the subject moves during the time of the exposure. For a typical action subject, such as a bike or car, you need the subject to have moved less than 2mm for a sharp shot, and less than 10mm for it to be worth keeping in the album!



WHAT BLUR LOOKS LIKE

1mm blur Here, we've simulated 1mm of movement. The cyclist is slightly soft, but you could easily sharpen it.
5mm blur With 5mm of movement the blur becomes visible without zooming in. It's probably acceptable, with sharpening.
10mm blur The blur is too bad to fix and this shot would have to be rejected.

MPH	Metres per second	1/8000 sec	1/4000 sec	1/2000 sec	1/1000 sec	1/500 sec	1/250 sec
5	2	0.3mm	0.6mm	1.1mm	2.2mm	4.5mm	8.9mm
10	4	0.6mm	1.1mm	2.2mm	4.5mm	8.9mm	17.9mm
25	11	1.4mm	2.8mm	5.6mm	11.2mm	22.4mm	44.7mm
50	22	2.8mm	5.6mm	11.2mm	22.4mm	44.7mm	89.4mm
100	45	5.6mm	11.2mm	22.4mm	44.7mm	89.4mm	178.8mm
150	67	8.4mm	16.8mm	33.5mm	67.1mm	134.1mm	266.2mm

■ SHARP ENOUGH ■ WILL NEED SHARPENING ■ TOO BLURRED TO BE ACCEPTABLE

NIKON KNOW-HOW – CONTINUED

Capture movement creatively

Wide lens apertures aren't the only way to produce blur – the other big factor is movement



01 STATIC SUBJECTS

Not everything in the scene will move at the same speed, and some things won't move at all – like these rocks and cliffs. As long as you use a tripod to keep the camera still, the static elements will stay sharp however long the exposure you select.

02 MOVING WAVES

The waves are constantly washing in and out during the exposure so they blur into a soft mist. They're moving quickly, though, so you can blur them with an exposure of around one second – though longer exposures can be used to give a smoother look.

03 MOVING CLOUDS

The movement of clouds is much slower, and they appear stationary during this one-second exposure. To show movement in clouds you will likely need to increase the exposure to a minute or more, turning them into streaks of colour and tone in your image.

WHAT YOU'LL NEED

By choosing the right shutter speed, you can control which elements of the picture are blurred. The techniques for doing this are relatively straightforward, but you will need to use the right equipment.



TRIPOD

You'll need a tripod to keep the camera still during the long exposures required for these shots – the heavier the better, to cut vibrations.



ND FILTER

There's too much light in the daytime for long exposures, so you'll need an ND (neutral density) filter to reduce it and allow long exposures.



REMOTE RELEASE

A remote release will prevent you joggling the camera when you fire the shutter. More advanced remotes have built-in timers for long exposures.

Get in control How to set the shutter speed

Using S (Shutter Priority) mode provides simplicity while M (Manual) mode allows for a greater degree of control. Both give you direct control over the length of the exposure

01 S MODE

In S, or Shutter Priority mode, you select the shutter speed and then the camera selects the lens aperture that will give the correct exposure. This isn't always possible – the light may be too dark for the shutter speed you want, even at the widest aperture, or too bright even for the smallest aperture. Watch out for 'Lo' or 'Hi' warnings in the viewfinder. If you ignore them, the exposure will be wrong, but you can increase the ISO or use an ND filter to compensate in these situations.



02 M MODE

In M, or Manual mode, it's up to you to get the exposure right – you choose both the shutter speed and the lens aperture, using the exposure indicator in the viewfinder to check the exposure. Manual mode is useful when working with ND filters because these are often too dense to see through once they're fitted, so you need check the framing and exposure before you add the filter, and then apply an exposure adjustment manually according to the strength of the filter and light conditions.



When's it safe to handhold your Nikon?

Subject movement is just one cause of blur; the other is camera movement

HH Handheld without VR
VR Vibration Reduction
T Tripod

FX	DX	1/1000	1/500	1/250	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1
15mm	10mm	HH	HH	HH	HH	HH	HH	HH	VR	VR	VR	T
28mm	18mm	HH	HH	HH	HH	HH	HH	VR	VR	VR	T	T
50mm	35mm	HH	HH	HH	HH	HH	VR	VR	VR	T	T	T
100mm	70mm	HH	HH	HH	HH	VR	VR	VR	T	T	T	T
200mm	130mm	HH	HH	HH	VR	VR	VR	T	T	T	T	T
400mm	270mm	HH	HH	VR	VR	VR	T	T	T	T	T	T
800mm	530mm	HH	VR	VR	VR	T	T	T	T	T	T	T

Subject movement and camera movement are two completely different things. You can often achieve striking creative effects with subject movement, but camera movement (or 'camera shake') just produces an unattractive all-over blur where nothing in the picture is sharp.

There is an easy way to work out the minimum shutter speed for handheld photography, based simply on the focal length you're using (or effective focal

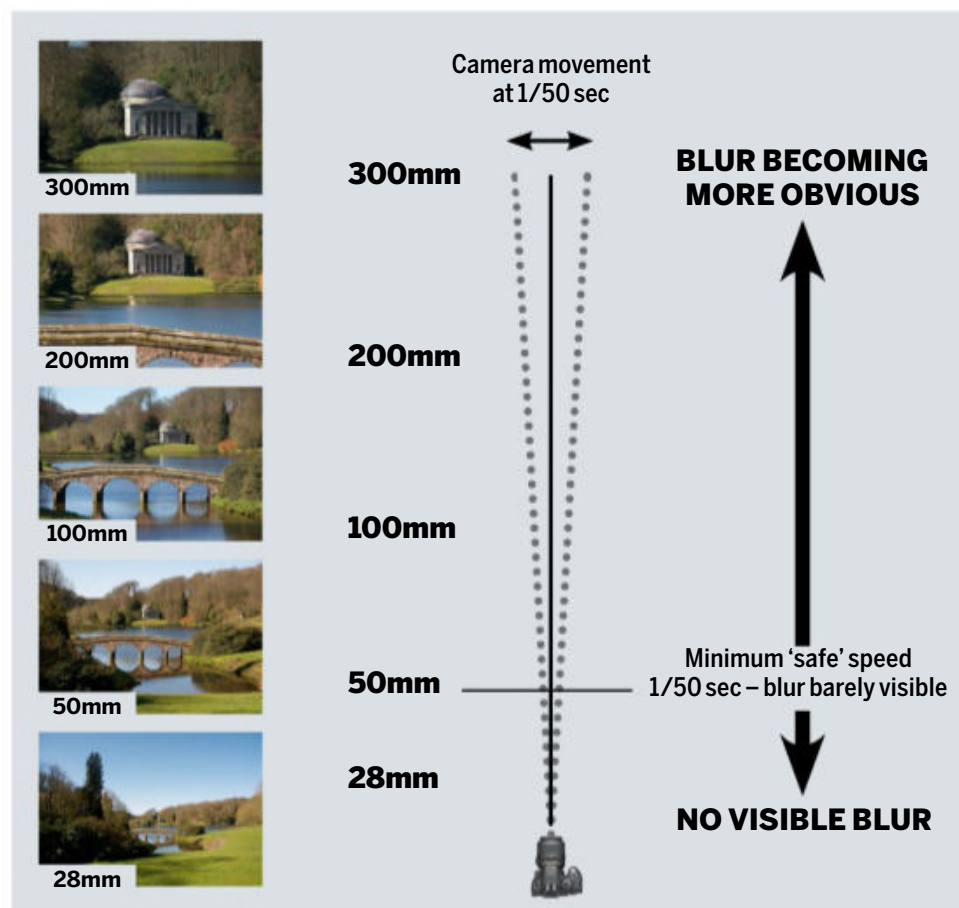
length, if you're using a DX-format Nikon). For example, if you're shooting at a focal length of 30mm, 1/30 sec is the slowest 'safe' speed for handheld photography. If you're shooting with a 500mm lens, it's 1/500 sec.

Of course, many lenses have VR, or 'Vibration Reduction' systems, and full-frame Z-series Nikons have 'in-body image stabilization' (IBIS). These reduce the effects of shake and allow you to use

shutter speeds two to five steps slower than normal. You have to remember that although this will stop camera movement, it has no effect on subject movement. If you want to freeze a fast-moving subject, you'll still need a fast shutter speed, with or without VR. You can use our table, above, to work out the minimum 'safe' speeds for different lenses. We allow an extra three steps for VR – you may get more, but it's best to be conservative.

Camera shake and focal length

The amount of shake is the same when taking all these shots – it's the magnification that makes it look worse



How VR works

Many Nikon lenses have Vibration Reduction built in (they have 'VR' in the name). Other manufacturers have their own variants. Here's how VR works...

01 Inside the lens, gyroscopic sensors detect any movement and instantly counteract it by moving a 'floating' lens assembly, which keeps the image steady.

02 Strictly speaking, you should switch the VR off when the camera's on a tripod because it could introduce vibration. In practice, most of us forget and it doesn't seem to be a problem.



Many Nikon lenses have VR, and some have 'Normal' and 'Active' modes as well.

03 If you're shooting handheld, you can leave the VR switched on all the time. VR doesn't guarantee sharp shots, but it does improve your chances of good results when you're using marginal shutter speeds.

04 Some lenses have a special Active mode. This is designed for situations when you're being badly shaken about as you're taking pictures – if you're shooting from a moving vehicle, for example.



Ask Matthew...

Our resident Nikon expert Matthew Richards answers your questions and solves your problems. If you have a Nikon-related question, email it to mail@nphotomag.com

Q I would like to buy a prime lens for my Z fc and am considering the Nikon Z DX 24mm f/1.7. Would you go for that lens or something else?

Tom Fellowes

A Naturally, you can use any FX (full-frame) Z-system lens on a DX (APS-C) format camera like the Z fc, Z 30 and Z 50. However, the Nikon Z DX 24mm f/1.7 (£269/\$277) is tailor-made for the job, gives an 'effective' 36mm focal length in full-frame terms, and has a fast f/1.7 aperture rating. We published a full review of the lens back in issue 153 and were impressed with its performance and compactness. But it has to be said that build quality isn't overly robust,

as it has a plastic mounting plate and doesn't feature any weather-seals.

I would actually choose the brand-new Viltrox AF 27mm f/1.2 Pro Z. This lens combines an effective focal length of 40.5mm with a super-fast f/1.2 aperture, and features a very sophisticated optical layout. It lives up to its 'Pro' name tag with a weather-sealed metal casing, coated brass mounting plate, customizable L-fn button and aperture control with a click/de-click switch.

Q I was set to buy a Godox VING V860III after reading issue 159's Big Test but have just noticed they also do a 'V1' flashgun. Which is better?

Maggie White



The optional Godox AK-R1 Accessory Kit contains a wide range of light modifiers and is well worth the additional £39/\$59.

A The Nikon-dedicated version of the Godox VING V860III was a worthy winner of our Big Test. I use a pair of them with the companion dedicated XPRO-N radio-frequency wireless trigger as my go-to flash setup. Running on a rechargeable Li-ion battery pack, the flashgun has great stamina and really fast recycle speeds, even using full power. It's also standout value at around £223/\$179.

The Godox V1 is very similar to the V860III in almost all respects. The main difference is that the V1 has a circular flash tube that's designed to give a softer, smoother lighting effect. The head features a panel at the front that spreads the light more evenly, avoiding a hot spot at the centre and giving a more gradual fall-off towards the circumference. It's a bit pricier to buy at around £257/\$199.

Q I'd like to get a large-format A3+ printer for top-quality photo printing in both colour and black and white. Which model would you recommend?

Stephen Halfpenny



Costing around £420/\$545, the Viltrox AF 27mm f/1.2 Pro Z, for APS-C-sensor mirrorless Nikons, is incredibly good value for such a super-fast and high-performance prime lens.



In a nutshell, the PIXMA PRO-200 is the top choice if you just want to print on glossy and lustre paper, whereas the imagePROGRAF PRO-300 wins out for matte and fine art media. It features a chroma optimizer to reduce bronzing.

A I'd definitely go with either the Canon PIXMA PRO-200 (£429/\$549) or the Canon imagePROGRAF PRO-300 (£649/\$899). Both are terrific printers and have their own particular plus points. The PIXMA PRO-200 runs on eight dye-based inks and is unbeatable for both colour and monochrome photo printing on glossy and lustre papers. That's because the relatively small molecules of dye are fully absorbed beneath the protective top coating of the paper. Print speed is also very fast and prints are touch-dry as they leave the printer.

Although both printer models look virtually identical, the imagePROGRAF PRO-300 runs on ten pigment-based inks. As such, it's not as fast but is much better suited to printing with matte and fine art media. It's also pretty good on glossy paper, thanks to a 'chroma optimizer' cartridge that is used to reduce bronzing and ensures more uniform reflectivity across the image.

Q I'm a bit confused about the different NEF formats available

for Raw quality shooting in my camera. Which option is the best one to select?

Mike Holley

A Compared with the 8-bit colour depth of JPEG images, 12-bit Raw files can hold a lot more pictorial information, while 14-bit Raw files go even further. The greater dynamic range of Raw files gives far more latitude when editing, and can be a huge help in stopping bright highlights washing out to white, and for bringing out missing detail in dark shadows.

The regular compression option is slightly lossy, a bit like using a very high-quality JPEG mode, so some image information is lost. Lossless compression is similar to the LZW option for TIFF format image files, so all the image information is retained, but files have larger data sizes. On the plus side, with no compression applied at all, saving Raw files is less intensive for the camera's image processor, so you may notice an increase in battery life. Personally, I find 14-bit Compressed to be the best option. **M**



Editing Raw files in an app like Nikon NX Studio gives you far greater latitude over adjustments to exposure and options for picture control, white balance and other parameters.

Secondhand superstar

Q What's the best secondhand full-frame DSLR I can buy, bearing in mind I don't need the big megapixel count of the Nikon D850?

Karl Atkins

A **Matthew recommends...** The Nikon D750 is a superb camera that I used for years but the newer D780 is even better and has a significant advantage. That's the DSLR I'd go for.



Nikon D780

IN SOME WAYS, THE D780 COMBINES THE BEST BITS OF A DSLR AND A MIRRORLESS CAMERA

RELEASED: 2020
PRICE NEW: £2299/\$2297
SECONDHAND PRICE:
 'Excellent' £1499/\$1399
 'Good' £1299/\$1199

The D780 takes all of the D750's winning design and handling cues, but adds on-sensor phase-detection autofocus and EXPEED 6 processing, inherited directly from the Z 6 and Z 7. The net result is that you get a highly capable and entirely natural-feeling DSLR for shooting stills in viewfinder mode, coupled with the same kind of accuracy and performance as a mirrorless camera in live view and for shooting movies – with uncropped 4K UHD recording, down-sampled from 6K capture. In regular viewfinder mode for stills shooting, you get a typically long battery life for a DSLR, this time of 2260 shots.

Key points

- 1. Hybrid autofocus**
The image sensor has phase-detection and contrast-detection AF.
 - 2. Tilting touchscreen**
The 3.2-inch screen works well for Live View and video.
 - 3. Pentaprism viewfinder**
The pentaprism viewfinder gives 100% frame coverage.
- Sensor:** 24.5Mp CMOS,
Processor: EXPEED 6
AF points: 51 (15 cross-type)
Shutter speeds: 1/8000 to 30 sec, Bulb
ISO range: 100-51,200 (50-204,800 exp)
Viewfinder: Pentaprism, 0.7x, 100%
Rear screen: 3.2-inch, 2359k, touch, tilt
Memory: 2x SDXC UHS-II
Size: 144x116x76mm
Weight: 840g
Battery life: 2260 shots



1

The search for the **world's best Nikon photographer of 2024** begins! Each issue the monthly *N-Photo* POTY 2024 photo contest's top 10 images are selected by the *N-Photo* team. This issue's competition has the theme of **still life** photography...

NPOTY is powered by  Photocrowd

1. Veil of Butterflies

BY HAYLEIGH

This image has such a strong and creative concept, it had to be our winner. The skull connotes death, while the butterflies symbolize not only life, but rebirth. We also love the extremely subtle pressed flowers beneath the skull, as well as the reflection. The beam of light that scythes through the frame acts as a spotlight, highlighting the macabre arrangement. And to finish, a cool, muted colour palette contrasts against the warm oranges used to represent the butterflies.

Camera:	Nikon Z 7II
Lens:	85mm f/1.8
Exposure:	1/100 sec f/8, ISO1600

2. On Pointe

BY STEVE JAMES

It's not surprising that this image looks stunning, an awful lot of work went into it. We love the subtle lighting, created by 'light painting' multiple frames with a torch and blending them together in post. We're guessing the window-frame-like shadow was created using a gobo, while the gorgeous painterly background was achieved by hand-painting an old door. An excellent image!

Camera:	Nikon D850
Lens:	85mm f/2.8
Exposure:	2 secs, f/16, ISO64

3. Hyacinths

BY DARIAGUFO

This image is a blend of four exposures and depicts a pair of hyacinths and is a still-life masterclass. The cool blues and purples provide an analogous colour palette (as neighbouring colours on the colour wheel), while the draped cloth adds texture to both the foreground and background.

Camera:	Nikon D610
Lens:	35-70mm f/2.8
Exposure:	44-84 secs, f/16, ISO100



2



3



WIN! A WhiteWall Photo Lab voucher Worth £100! 

Witness your work as a glorious gallery-quality print from award-winning online photo laboratory WhiteWall. The winner, as judged by the *N-Photo* team, will receive a £100 WhiteWall voucher to have their entry printed in a range of stylish options including acrylic, aluminium, giclée and canvas in a huge array of sizes. See www.whitewall.com/uk



4

4. Medicine

BY DAVID ELLIS

Traditional still-life paintings often explored the macabre, with human skulls used to represent death or mortality. This arrangement is clearly themed around early 20th century medicine. The chiaroscuro-style lighting has created rich shadows that blend into the dark background, yet all of the items are evenly lit. A fantastic still life!

Camera:	Nikon Z 6II
Lens:	24-70mm f/2.8
Exposure:	1/60 sec, f/7.1, ISO50

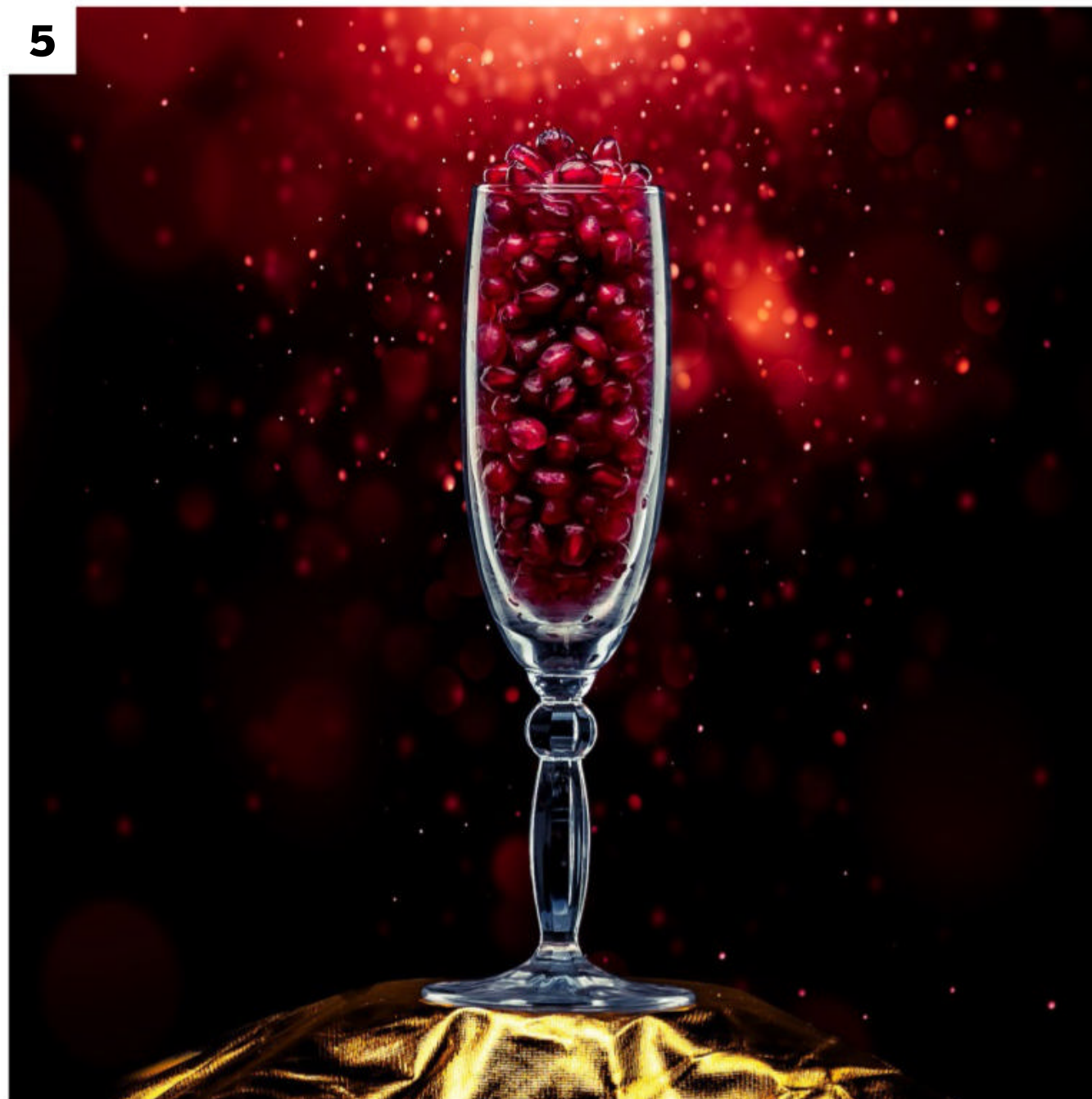
5. Pomegranate

BY ABOLFAZLPIX

We really love the creativity of this modern take on a classic genre. The glass appears to have been lit from either side to capture its shape and filled with pomegranates to provide interest. But what really makes this image pop is the strong lighting in the top of the frame and the glittering bokeh, all tied together with the golden cloth placed below. What a stunning image!

Camera:	Nikon D610
Lens:	85mm f/1.8
Exposure:	1/250 sec, f/8, ISO100

5





6

6. Italian Breakfast
BY ANNAFRANCA

This image blends still life and food photography. The chair invites the viewer to sit at the table, while dustings of icing sugar and a slice taken from the pie creates a lived-in feel. Overall, the image conveys an irresistibly wholesome and rustic vibe.

Camera:	Nikon D750
Lens:	50mm f/1.8
Exposure:	56 secs, f/16, ISO100

7. Impressionistic
BY LAYERS21

You'd be forgiven for thinking this classic still life was an oil painting. The impressionist style was achieved in post, but far from being a simple filter, the result is a carefully crafted digital artwork. It's hard to imagine a more authentic end product.

Camera:	Nikon Z 7II
Lens:	50mm f/1.8
Exposure:	1/13 sec, f/9, ISO5000

8. Trace
BY G.GOETZINGER

This surrealist still life is a clever concept. It's well lit, so the inside of the shell isn't obscured in shadow. The composition works well, the shell is placed on the left portion of the frame, so the footprints trail off to the right, into active space.

Camera:	Nikon D850
Lens:	105mm f/2.8
Exposure:	1/20 sec, f/11, ISO320

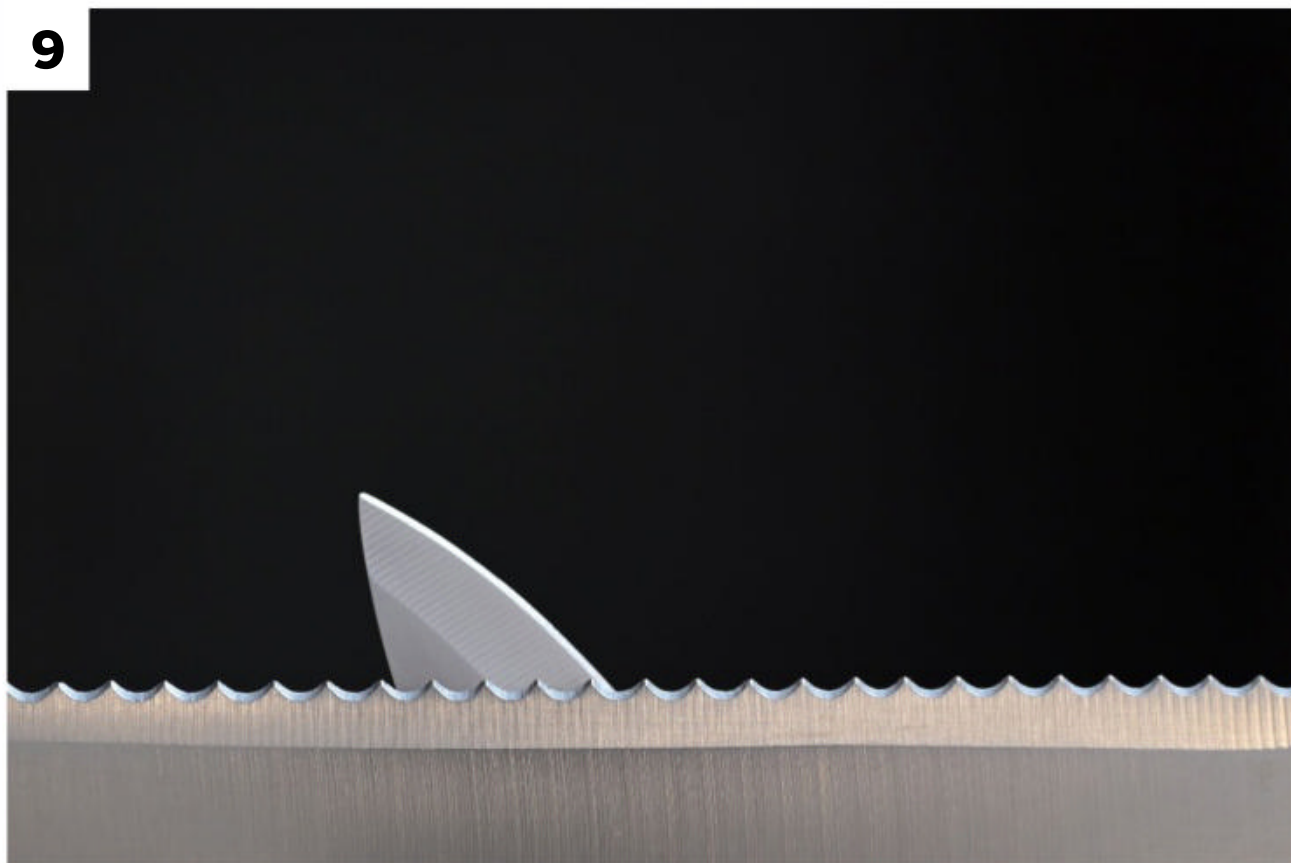
7



8



9



9. Jaws

BY TEKAPPA

A simple idea that's made a fantastic surrealist image. The serrated bread knife forms the waves, while the paring knife is the dorsal fin of a shark. The fin's angle denotes its directional of travel, from left to right, with space framed on the right-hand portion of the image for the subject to move into. Crucially, the setup has been photographed perfectly square on and with a standard focal length to minimize distortion.

Camera:	Nikon Z 6
Lens:	50mm f/1.8
Exposure:	1/25 sec, f/2, ISO400

10. Tulips with Mango

BY ALLAN COPSON

A natural light source has been used to create traditional chiaroscuro lighting. We like the use of colour. Orange and blue are opposites on the colour wheel, so the orange tulips and mango pair perfectly with the blue vase and cloth.

Camera:	Nikon Z 50
Lens:	50-250mm f/4.5-6.3
Exposure:	1/250 sec, f/5, ISO1600

10





WIN! A Nikon Z f

The overall winner of *N-Photo's* Photographer of the Year 2024 will receive the grand prize of a Nikon Z f!

When we reviewed the Nikon Z f, we called it 'Nikon's best-looking camera since 1982!' And now, together with Nikon UK, we're giving you the chance to win this full-frame retro-style Z camera. It's an incredible prize that's worth a whopping £2299/\$1999. Enter any of the 12 rounds of NPOTY 2024 to be in with a chance of taking Nikon's nostalgia-infused Z camera home – and of being crowned *N-Photo's* Photographer of the Year 2024.

A blast from the... future?

The Z f is far from retro under the hood. It's built around a 24.5Mp full-frame CMOS sensor and inherits some of the latest advancements from the Nikon Z 8 and Z 9. It's powered by the latest EXPEED 7 processor, has a native ISO range of 100-64,000, and uses the same impressive autofocus system as the Z 8 and Z 9.

It's equipped with 299 focus points that enable you to pinpoint your subject with superb accuracy. This system is adept at subject tracking, including humans (faces, eyes), animals, birds and vehicles, ensuring precision even in challenging shooting conditions, down to an impressive -10EV.

Unique to the Nikon Z f is the introduction of subject-detection algorithms that function seamlessly in manual focus mode or when using adapted manual-focus lenses, enhancing exposure accuracy based on recognizing the subject.

The camera is also capable of achieving up to eight stops of image stabilization with

compatible lenses and is the first Nikon camera to offer Pixel Shift Shooting. This physically moves the sensor to capture a sequence of up to 32 Raw images. When blended together in Nikon NX Studio, this creates a whopping 96Mp image.

Nikon's Focus Point VR system takes in-body image stabilization a step further by employing the camera's active focus point to enhance stabilization around the subject.

It's a serious video tool too, supporting 4K up to 60p; oversampled 6K footage up to 30p for better quality 4K; and Full HD up to 120p. It also shoots 10-bit internally and records continuously up to 125 minutes.

Z f Features

- 1 The camera body has a leather-like textured finish, adding to its retro charm.
- 2 Z 8/9 tech and totally new features make this a modern camera beneath the hood.
- 3 Precision-milled brass control dials don't just look the part, they will patina with age.
- 4 Black-and-white switch allows you to toggle seamlessly between colour and mono.
- 5 The rear LCD is fully articulating, rather than tilting as seen on Nikons like the Z 6II.
- 6 Retro-style shutter button has a screw to fit an after-market soft-shutter-release.

How to enter

HOW OUR COMPETITION WORKS

- Each issue, the *N-Photo* team sets a theme – we next want to see your best Wildlife photography. Enter at www.photocrowd.com/npoty24wildlife
- The deadline for entries is 14 March 2024. The top 10 gallery will appear in *N-Photo* 162, on sale 11 April 2024
- Here are our next three competitions:
Flowers & Plants Opens: 07 Mar
Closes: 11 Apr
www.photocrowd.com/npoty24flowers
Mono Opens: 04 Apr Closes: 09 May
www.photocrowd.com/npoty24mono
Action Opens: 02 May Closes: 06 Jun
www.photocrowd.com/npoty24action
- It goes without saying that *all* images must be shot on Nikon cameras!
- Please ensure your entry *does not* contain a watermark and *is* submitted with the necessary EXIF data: the model of the camera and lens, and the shutter speed, aperture and ISO used.
- 12 competitions will appear throughout 2024, and the overall *N-Photo* Photographer of the Year 2024 – and winner of the grand prize – will be crowned in the issue that goes on sale in January 2025. So, grab your Nikon and start capturing photos. Good luck! 📷

Readers' letters

We'd love to hear your thoughts on the mag and all things photographic! You can write to us, message us or share your images in the following ways: ✉ mail@nphotomag.com
 🐦 twitter.com/nphotomag 📘 facebook.com/nphotomag 📷 instagram.com/nphotomag

★ Star Letter

Splash out!

I would like to thank everyone involved in my recent Apprentice day, shooting high-speed flash photography with Iain Afshar. I applied to be an Apprentice ages ago, and then received an email from editor Adam, inviting me to take part in a Splash Photography workshop. From that day I was looking forward to the event, until the day came and I set off early in the morning.

I met Adam and Mike for a coffee and they ran through how the day would play out. We then met Iain, who was to be my teacher for the day. This took the form of an introduction to him and his background as a photographer – I was intrigued to learn that his speciality was 'adventure photography', but his Splash workshop was inspired by shooting hummingbirds in the Amazon, as it was based on the same high-speed

photography techniques! After learning to dial in the optimal camera settings ready for the first set-up, I then took several images dropping various objects into glasses of coloured water.

The next set-up was very similar but used a water droplet machine, to both release a series of drips and fire the camera shutter precisely as two drops

collided for an incredible crown effect, which I found very impressive.

Then it came to the water balloons, punctured with a 'thrown' dart (actually attached to a stick) but the most fun was 'flying' the Red Arrow aeroplane to burst through the balloons. Getting the plane to hit its target and burst the balloon, and capture it at just the right

moment, was something of a challenge! It was like when I go fishing; just one more go and I was sure I could improve on the last image.

I was very excited to tell my wife and show her the amazing images I had captured thanks to Iain, and how much I learned.

I would like to thank Iain and the *N-Photo* team for such an enjoyable day and recommend all the readers to apply to be an Apprentice.

Christopher Haliburton



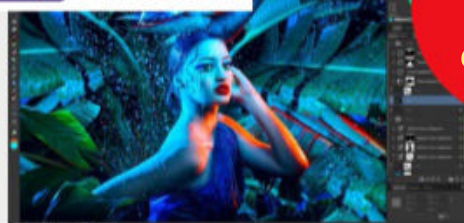
It took quite a few goes before Christopher successfully captured this balloon burst shot – watch our video to see it in slo-mo action!

Thanks for summing up how an Apprentice day works from a reader's point of view, Christopher, and the amount of work (and fun!) that actually goes into the images printed on the page. We've put together an Instagram video reel that shows Chris's (many) balloon-popping attempts in action! See: <https://bit.ly/30aMOSS>

If you would like to be our next Apprentice, we've made applying as easy as popping your details on this form: <http://bit.ly/npapprentice>

Image: © Christopher Haliburton

AFFINITY Photo 2



WORTH £49

WIN! A copy of Affinity Photo 2

Write our star letter and you'll win a copy of the amazing Affinity Photo* for Mac or PC from Serif. This feature-packed software is just as powerful as programs that retail for many times its price – and all without having to pay a monthly subscription fee. With full support for Raw files, layers and 'professional' features such as Curves and live filters, it also boasts top-class focus stacking, HDR merging, panorama stitching and batch processing. Affinity Photo is available for Mac, PC and iPad, and files can be easily shared between devices so you can continue editing on the move. It opens Photoshop files, too. www.affinity.serif.com

*Winners will need to create an Affinity user account to download the app. The prizes are issued in accordance with the standard Affinity EULA and there's no cash alternative.

www.DigitalCameraWorld.com
The best from our companion website



Image: Nikon

1. Nikon issues firmware updates for mirrorless models

Camera Firmware updates can offer new and exciting features that can update your camera and boost performance, making it feel brand new, but just as importantly, they can fix issues developed after initial release. The most recent firmware released by Nikon fixes a major issue where the camera would not turn on if unused for some time. <https://bit.ly/3u9jLgy>



Image: Nikon

2. The Nikon Z f gives new life to one of my favourite lenses

I have a deep love of lenses and all the physics, chemistry and mechanical engineering involved. It's a spin-off from my camera collecting because often a body would come with an interesting lens. Testing the Nikon Z f, there was yet more fun to be had with the Sigma AF 14mm f/3.5, which I bought in the early 1990s to use on my Nikon F4 (and, later, F5). <https://bit.ly/47Mj7n4>



Image: PCH Pro Shop

3. Nikon's 'monster' zoom is longest lens we've ever seen

The rare Zoom-Nikkor 1200-1700mm f/5.6-8P IF-ED lens is an absolute monster, and like the one in Loch Ness, pops its head up occasionally to remind us of its existence. The Nikon lens is one of the largest full-frame zoom lenses ever developed. PCH Pro Shop in Belgium happened to get its hands on one, and the size of the lens is unbelievable. <https://bit.ly/47KR209>



Sign up to our newsletter for the latest Nikon news! Simply scan this QR code or go to <https://bit.ly/dcwnews>

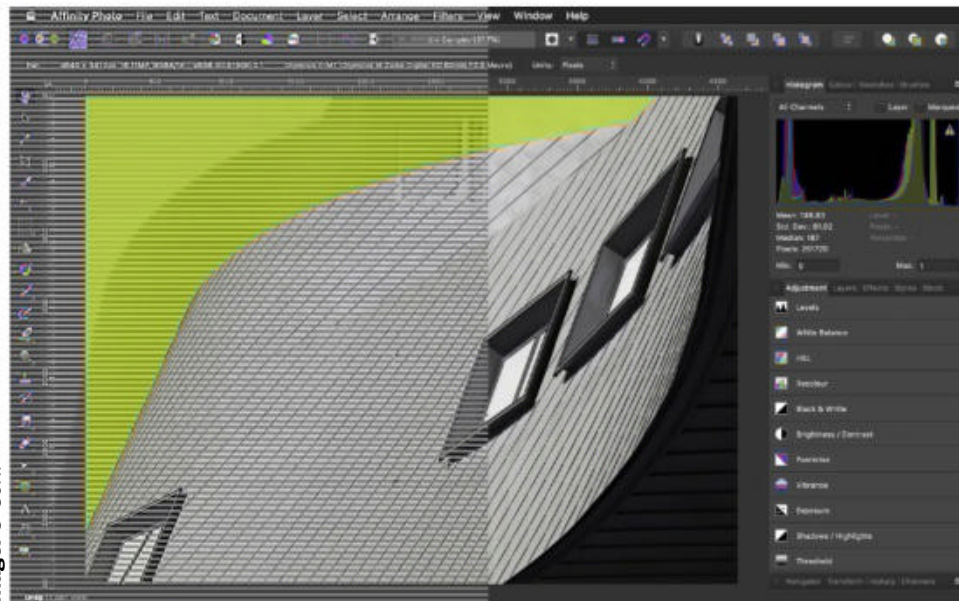


Image: © Serif

Affinity Photo is capable of doing most things that Photoshop can do – and all without the monthly subscription.

Affinity affirmation

I'm just dropping you a line to say how much I appreciate the Affinity Photo tutorials in the magazine. I do not use Photoshop or Lightroom, especially as this requires a monthly subscription, so please keep the Affinity tutorials going as I am finding them to be a great help.

Edward Walker

We're glad that you're enjoying our Affinity Photo tutorials, Edward. Because many of the commands and features in Affinity are close to those in Photoshop, you should be able to follow many of our Photoshop tutorials too, with just a little adaptation.

Search me

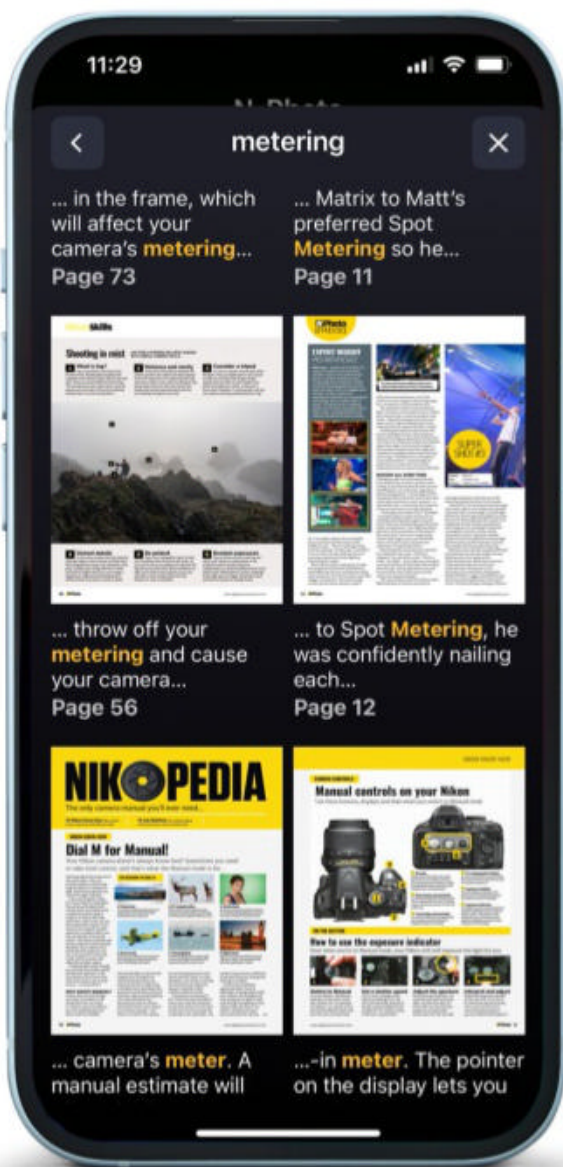
I am a regular reader of the magazine and recently wanted to find a particular article but could not recall which magazine I was reading when I saw it. So I was wondering if you could confirm whether a search function exists (online website or similar, or through the mobile platform or at Pocketmags), where items can be searched for and the issue and page number would be returned.

I hope you can help with this as I am currently having trouble finding metering mode-related articles.

Keep up with the great work as the magazine is amazing.

Gyorgy Sarkany

Most of the digital platforms that N-Photo is published on enable you to search for a term within a particular issue, so you'd have to open each issue individually. However, we are planning on adding the ability to search through your entire library to our own N-Photo app in a future update. Watch this space... N



Our digital editions enable you to search within an issue, but currently not your entire library – but we're working on this!

YOUR STORIES



[1] Chester was photographed against a blue backdrop to complement his golden coat.

Camera:	Nikon D7200
Lens:	18-270mm f/3.5-6.3
Exposure:	1/60 sec, f/6.3, ISO200



[2] Marie worked with Motley in low lighting, while he stands against a backdrop of bluebells.

Camera:	Nikon D7200
Lens:	18-270mm f/3.5-6.3
Exposure:	1/1000 sec, f/6, ISO2500

Sit, sit, sitters...



Marie Ainge's stint as an *N-Photo* apprentice inspired her to invest in studio lighting and continue taking portraits; here are the results...

MISSION: Put *N-Photo* apprentice teachings into practice to improve as a portrait photographer

PHOTOGRAPHER: Marie Ainge

KIT USED: Nikon D3400, D7200, Tamron 18-270mm f/3.5-6.3 Di II VC PZD

FACEBOOK: https://bit.ly/marie_ainge_fb

FLICKR: https://bit.ly/marie_ainge

I'll never forget the line 'You can't be an *N-Photo* apprentice if you don't apply'. It's exactly right; so I did! I applied in 2020 – before the Covid lockdown. In 2022, out of the blue, an email arrived from Editor Adam Waring, offering me the chance to spend the afternoon with professional maternity photographer Tianna J-Williams (*N-Photo* 137). Super-excited, I jumped at the chance. After my amazing day when

I was waiting for a train with Adam and Deputy Editor Mike Harris, they asked me what equipment I might buy. "Looks like I'll be investing in some lighting," I said and so my journey began. As I wrote in a thank you letter to the team, many of us have these ideas and are often disappointed when we don't hear back, but not me, not this time.

Head to head

For my home studio, I purchased my first Elinchrom ELC 125 TTL Head, as well as the Deep 125cm silver umbrella and translucent diffuser, a clip-lock stand and transmitter. I couldn't wait to email Mike and tell him about my purchase and he told me to keep in touch, so here I am.

Since my apprentice shoot with Tianna and the *N-Photo* team, I've continued down the path of photography and have found

myself focusing on pets and people (not necessarily together...). I use my monthly copy of *N-Photo* alongside my favourite book *Mastering Portrait Photography* by pro portrait photographer and *N-Photo* columnist Paul Wilkinson (see page 38). I enjoy reading, learning and testing out suggestions from both sources, but finding models to support my learning isn't easy.

I love experimenting and that meant I needed to further invest in additional lighting, so I purchased an Elinchrom D-Lite RX ONE Head to use as a backlight. I have so many fabric backdrops as different dogs suit different colours! I also now have two standing 100W lamps, which are used for my monochrome work, which I am absolutely in love with at the moment and I'm now considering a 70-200mm lens. My equipment is geared for indoor studio work [1], but I do love the outside world too [2] especially the golden hour, as shown with my image of Olivia [4].

My dog, Motley, who is two years old, has been around me and my camera since →



I love experimenting and that meant I needed to further invest in additional lighting

Marie's Top Tips



- Don't be afraid to experiment with your lighting. Adjust your setup again and again, and go back to your laptop to check out how your images are looking.
- Question why you've ended up with a particular result. If you're not happy, go back and test out alternative options. Something as simple as tweaking the focal length can make a big difference.
- Enjoy yourself; chat with your subject and it'll relax everyone. Smile, even if you're nervous, being nervous makes you really think about what you're trying to achieve.



[3] A commanding studio portrait of Marie's proud pet pooch Motley.

Camera:	Nikon D7200
Lens:	18-270mm f/3.5-6.3
Exposure:	1/100 sec, f/6.3, ISO160

YOUR STORIES



[4] Photograph portraits during golden hour to work with beautiful, warm lighting.

Camera:	Nikon D7200
Lens:	18-270mm f/3.5-6.3
Exposure:	1/640 sec, f/6.3, ISO400



[5] A series of monochrome poker portraits allowed Marie to experiment with hard light.

Camera:	Nikon D7200
Lens:	18-270mm f/3.5-6.3
Exposure:	1/6 sec, f/8, ISO3200

he was eight weeks old and he is always finding his way into the frame. In this photo **[3]** he stands proud, demonstrating his strength and power. The image was captured with my Elinchrom studio setup, as was Chester the golden retriever **[1]** who I photographed against a blue velvet backdrop and with a vignette, allowing his beautiful cream coat to stand out.

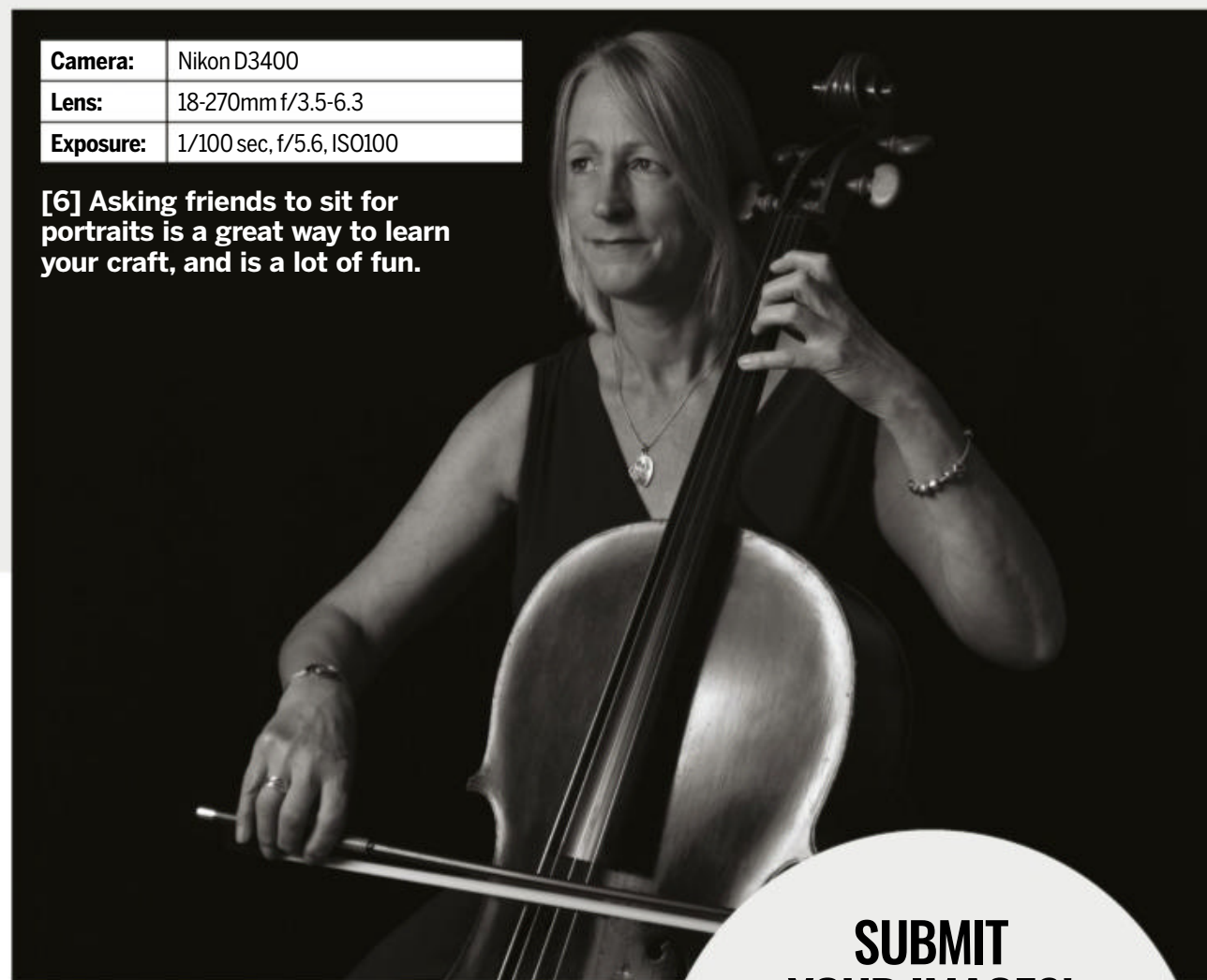
I also like to shoot monochrome portraits. The image of my husband, Rich, was lit using 100W lamps and barn doors, so I could control the angle of the light **[5]**. I wanted to create a series of images based on a poker night theme. I look forward to continuing to test the dramatic effects of hard lighting – I find it challenging.

I've been friends with cello teacher Maxine for six years, so she was all too happy to sit for me and offered to bring her cello. This image **[6]** was a favourite as I like the way the lighting edged the instrument with a delicate highlight.

So this is my story so far, but I have a request too. I wrote to you asking to be an apprentice and you obliged, and in doing so, you ignited a passion for photography that was greater than I thought I could find



I look forward to continuing to test the dramatic effects of hard lighting...



Camera:	Nikon D3400
Lens:	18-270mm f/3.5-6.3
Exposure:	1/100 sec, f/5.6, ISO100

[6] Asking friends to sit for portraits is a great way to learn your craft, and is a lot of fun.

again. Now, I'm asking you to continue inspiring me and all those people who buy your magazine. And if you put any one of my images on the front cover, you'd make another dream come true.

*Glad to hear being an apprentice supercharged your passion for photography, Marie. As for the front cover, your wish is my command... (Ed). **M***

**SUBMIT
YOUR IMAGES!**
To see your images here,
send a small portfolio to
mail@nphotomag.com
with 'Your Stories'
as the subject

**ON
SALE
NOW!**

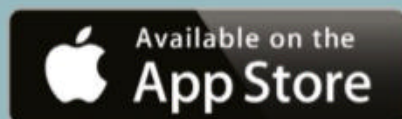


WHAT HI-FI?

DIGITAL . ONLINE . PRINT

SUBSCRIBE TODAY AND SAVE!

www.magazinesdirect.com/whi



TOP 10 THINGS YOU *MUST* SEE AT THE PHOTOGRAPHY & VIDEO SHOW 2024

The greatest show on earth (for photographers) is just around the corner!



We're very excited that The Photography & Video Show 2024 is almost upon us, and will be running from 16 to 19 March at Birmingham NEC. As well as coming to say hello to the *N-Photo* team on stand

H404, there's loads more on offer this year: there will be some legendary speakers

(most talks are free!), incredible show bargains (where you can pick up kit for less than anywhere else from top camera dealers and direct from manufacturers), get hands-on with a whole host of new and exciting products, and watch live demos with everything from beginner-level tips to business-related advice for working professionals! Even better, Nikon will

be there with a huge stand, where you can experience first-hand the very latest Nikon cameras and lenses, and perhaps see a surprise or two... plus there's the Nikon School stage, where you can learn from and meet Nikon Ambassadors and Creators. **N**

See the website details bottom-right to book advance tickets and save 20%!

1 Nikon is there!

You can't miss the Nikon stand, which is right at the show entrance at location **B600**. On show will be: the latest Nikon cameras and lenses to try, including the top-of-the-line Z 8 and retro-inspired Z f; you can join 'live' photo workshops; and the knowledgeable Nikon staff will be on hand to answer any queries that you may have.



2 Video

As the name suggests, The Photography & Video Show isn't just about photography; there's plenty of content for videographers too, from movie-making masterclasses to exhibitors specializing in video production.



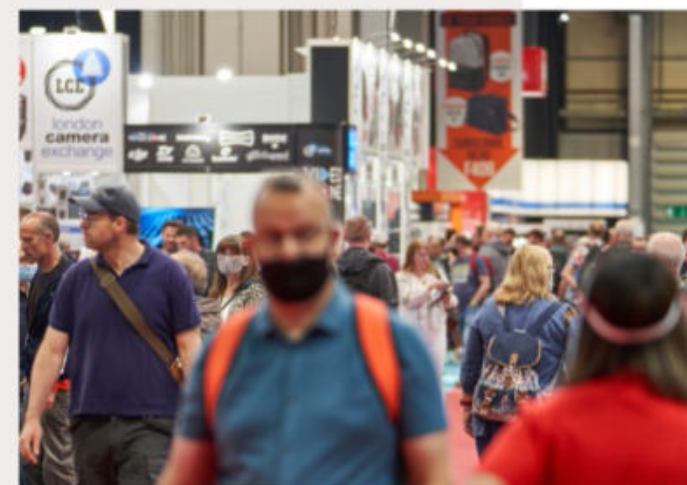
3 Inspiring talks

Some of the biggest names in photography will inspire you on three amazing stages: Photo Studio, In Motion Studio and Shoot to Inspire – and what's more, these talks are free! Confirmed speakers (more TBA) include Mattias Klum, Kim Grant, Ben Moore, Scarlett Page, John Miskelly, Gurvir Johal and Emma Dunham (who leads this issue's *Apprentice*, page 6).



4 Show deals

Retailers Camera World, London Camera Exchange and Wex will have unbelievable show discounts on the very latest Nikon cameras and lenses. Plus there will be great savings to be had on tons of cool kit that you've been meaning to buy at the right price!





5

Masterclasses

In addition to the wide range of free talks, you can attend a series of Masterclasses for a modest fee. The Photography and Video Beginner's/Turning Pro Masterclass costs £10, the Pro Forum is £10 for one session or £15 for both, while Specialist Masterclasses with top pros are £25.



6

Special show subs deal

We reserve our very best subs deal for the show, and this year if you subscribe to *N-Photo* on stand **H404**, you'll 'bag' yourself a free Vanguard Veo Select Slim Backpack (worth £99.99) to take home with you!



7



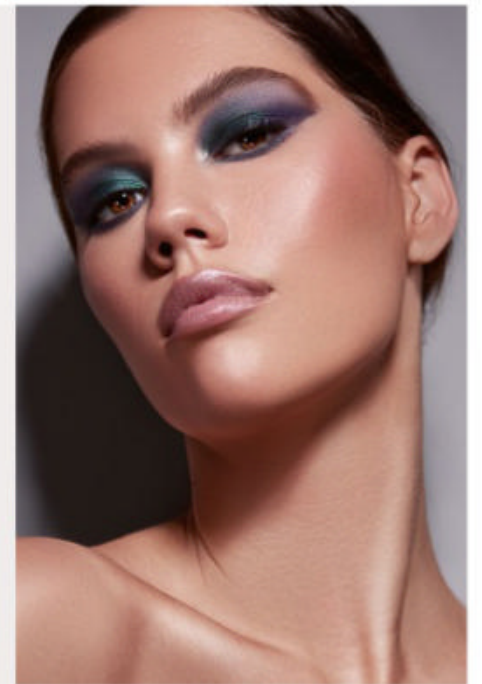
Live demos

Many of the exhibitors host their own talks and demos, with brand ambassadors aplenty showcasing kit and its capabilities. Learn more about your favourite brands from the experts and stick around to get more in-depth advice.

8

For the pros

There's loads on for pros, with four days packed with tech, talks and networking to help perfect your business. See www.photographyshow.com/for-professionals for an overview of what to expect.



9

Nikon School stage

Nikon Ambassadors and Creators join Neil Freeman and Ricci Chera for a packed programme of talks. Speakers include Rachel Bigsby, Jess Rose, Hermeilio 'Kino' Aquino, Keziah Quarcoo and Cara Brown, Carolyn Mendelsohn, Amy Shore, Scarlet Page, Mattias Klum, Angel Fuchs, Leon Neal, Alia Ali, Roxy Furman, Darren Boyd, Norris Niman, Gareth Cattermole – and many others!



10

New gear!

Try out the newest photographic gear to complement your Nikon setup, from third-party manufacturers of lenses such as Sigma and Tamron, to tripods, bag and filter brands, and plenty more besides. There are more than 250 exhibitors, including the likes of Manfrotto, Lowepro, Benro, H&Y and many others.



SAVE 20% ON ADVANCE TICKETS!

Visit www.photographyshow.com and use **NPTTIPS24** to claim your discounted tickets

NPhoto

Next issue

**Don't miss
N-Photo 161**

See page 24 for
our free bag
subs offer!

NEW NIKON SKILLS

Man-made landscapes

How to document
the human imprint
on the landscape,
from ancient castles
to modern feats
of engineering

ALSO NEXT ISSUE

Telephoto primes Big Test
City at night Apprentice
Wedding, fashion and portrait
photographer Brett Florens
How to shoot model railways
Metering modes explained
Viltrox 27mm f/1.2 review

Image: © Nigel Forster

ON SALE THURSDAY 14 MARCH

•Contents subject to change

NPhoto GearZone

New gear, buying advice and the world's toughest tests



REVIEW

92 Voigtlander 15mm f/4.5
Go wider with this surprisingly compact and lightweight manual prime



REVIEW

94 Nikon Z Teleconverters
Now you can extend telephoto reach with minimal loss of image quality



BIG TEST

96 Portrait primes
Our pick of fast short-telephoto primes that are just the job for taking pictures of people

BUYER'S GUIDE

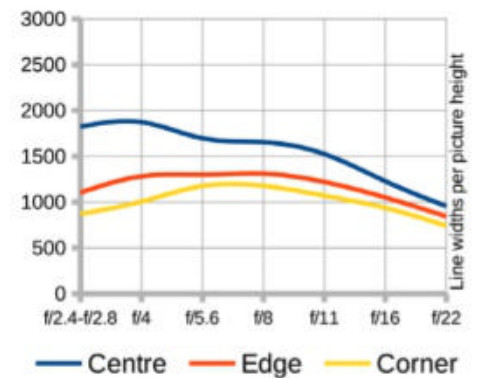
108 Nikon cameras & F/Z-fit lenses
Every current Nikon camera, plus an exhaustive round-up of lenses to put on 'em



Lab tests explained

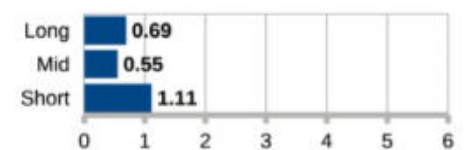
Sharpness

A chart with multiple sharp boundaries is photographed, the extent of blur at the centre, mid and edges showing how many line widths per picture height the lens can resolve. Simply put, the bigger the numbers the sharper the lens.



Fringing

Chromatic aberration is visible as purple or green fringing around high-contrast boundaries, caused by different wavelengths being focused on different areas of the sensor. The larger the number, the worse the score.



Distortion

A lens that bulges towards the edges of the frame produces barrel distortion, shown as a negative score. Pincushion distortion produces a positive score. A score of zero indicates no distortion.



Our awards in a nutshell



The best performance, design and value



A product that gives you more for your money



The very best kit that really sets the standard

Our scoring system

- 1.0** Forget about it!
- 2.0** Below average
- 3.0** Good for the money
- 4.0** Excellent product
- 5.0** Best-in-class



Voigtlander

15mm f/4.5 Super Wide-Heliar Z Aspherical

£849/\$799 www.voigtlaender.de

The Voigtlander 15mm f/4.5 Super Wide-Heliar Aspherical for Nikon Z cameras looks and feels an absolute classic. No autofocus? No problem!

Specifications

Mount: Nikon Z (FX)

Full-frame: Yes

Autofocus: No

Stabilizer: No

Construction: 11 elements in 9 groups

Angle of view: 110 degrees

Diaphragm blades: 10

Minimum aperture: f/22

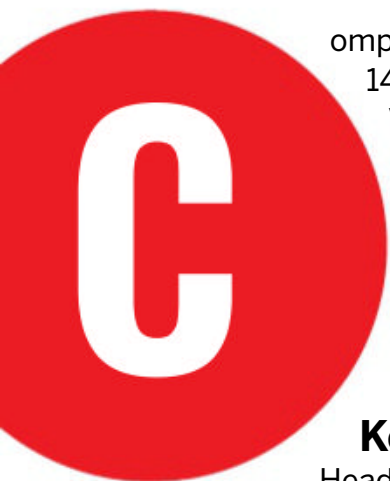
Minimum focusing distance: 0.126m

Maximum magnification ratio: 0.25x

Filter size: 58mm

Dimensions: 67x68mm

Weight: 290g



Compared with the Nikon Z 14-30mm f/4 S zoom, the Voigtlander 15mm f/4.5 Super Wide-Heliar Z Aspherical is relatively compact, a little over half the weight and has a similar wide angle of view and aperture rating.

Key features

Heading the feature list is the 'super wide' field of view, delivered by the Voigtlander's 15mm focal length. Indeed, you get a huge angle of view equating to 110 degrees on full-frame Nikon Z-system cameras. You can also use the lens on Z DX (APS-C format) bodies and get a still fairly wide viewing angle but, in reality,

it's only a little wider than you'll get from the dinky Nikon Z DX 16-50mm f/3.5-6.3 VR.

The expansive field of view is most useful for landscape photography and interiors. With that in mind, the lack of autofocus isn't really a problem, due to the huge depth of field generated by the short focal length. Indeed, shooting at f/8, the hyperfocal distance is approximately 1m, at which everything will be rendered sharply from just 0.5m all the way to infinity.

The lens can actually focus right down to 0.126m (about five inches) from the image sensor. This enables extreme close-ups and is also useful for selfies and vlogging, if you want to set yourself in the scene by including a large area of background.

When accurate focusing is more critical, the lens obliges with a focus distance scale

and depth of field markings for apertures of f/4.5, 5.6, 8, 11, 16 and 22. In-camera focusing aids are also available, including colour-change of the active focus point and focus peaking, both in the viewfinder and on the rear screen. Naturally, you can also use the magnified preview option when shooting with any Z-system camera.

The updated Heliar optical design is based on 11 elements in nine groups and features one aspherical element to boost sharpness and clarity while reducing aberrations. The aperture is controlled by a 10-blade diaphragm, which remains well-rounded when stopping down.

Build and handling

The construction looks very vintage and feels like adding a bit of history

VOIGTLÄNDER 15MM F/4.5 SUPER WIDE-HELIAR Z ASPHERICAL



The 15mm focal length allows you to cram an expansive amount of the scene into the frame.



Shoot at f/8, focus at infinity, and everything from half a metre away will be pin-sharp.

to a Z-system camera body. The lens feels solid and robust, with a metal casing, mounting plate and hood. As with many ultra-wide-angle lenses, the hood is fixed in place and helps protect the front element. Unusually though, it can be removed as it's held in place by two flat-head grub screws, although this is rather fiddly. The lens also features a 58mm filter attachment thread.

Despite having electronic communication with the camera, the aperture can only be adjusted via the on-board control ring, so it can't be used in Program AE and Shutter Priority modes, but needs to be used in Aperture Priority or Manual modes. Unlike a number of old-school Nikon lenses that have an aperture ring, it's positioned at the front of the barrel instead of at the rear. An upside of this is that we found it minimized the risk of altering the aperture accidentally during focusing. Manual focusing itself is a joy, thanks to the focus ring's knurled and ridged profile, and its super-smooth action.

Ultimately, build quality and handling are excellent, though it does lack weather-seals.

Performance

The Voigtlander 15mm truly punches well above its diminutive size and weight in terms of performance. Throughout our

real-world testing, sharpness proved excellent from the centre of the frame right out to the extreme edges and corners.

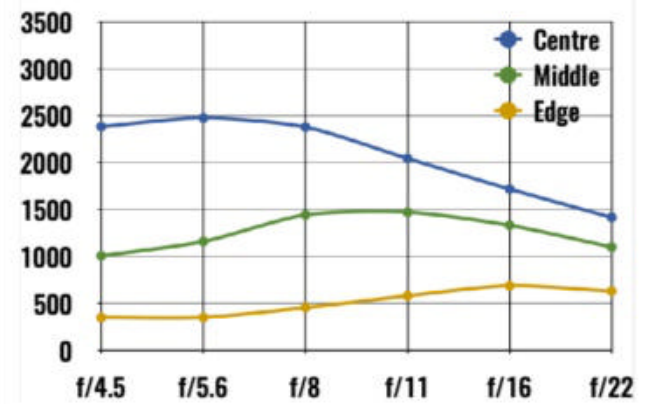
More surprisingly for such a tiny ultra-wide-angle lens, vignetting is none too severe even when shooting wide-open at f/4.5, and distortion is entirely negligible. The lack of noticeable distortion is actually pretty amazing considering that it's based purely on optical prowess. That's certainly not the case with many recent lenses designed for mirrorless cameras, which rely almost entirely on in-camera corrections. You can switch on automatic in-camera corrections for vignetting and distortion but they actually have no effect, as the lens doesn't support these functions.

Colour quality and contrast are impressive as is resistance to ghosting and flare. The lens also delivers attractive sun stars, although the modest aperture rating is less than ideal for astrophotography. **N**

Features

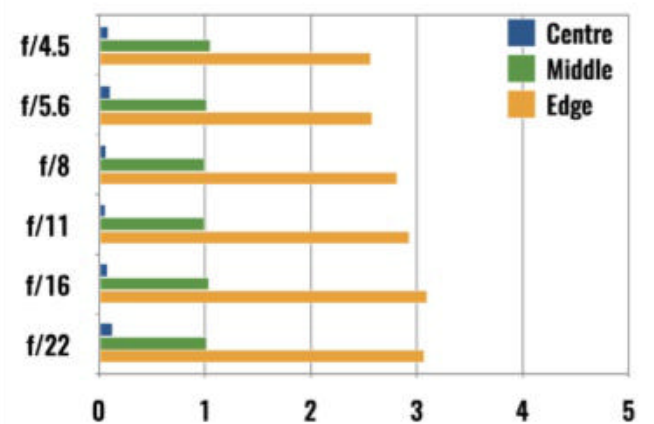
- 1 The lens is beautifully compact at just 67x68mm and it's a featherweight 290g.
- 2 A focus distance scale on the lens barrel has markings for all major apertures.
- 3 A thing of retro beauty, the manual controls have lovely handling characteristics.
- 4 The aperture ring is mounted towards the front and has to be dialled in manually.
- 5 The hood is tricky to remove via grub screws, but there's a 58mm filter thread.
- 6 It's solidly built, with metal casing, hood and mounting plate, but lacks weather-seals.

Sharpness



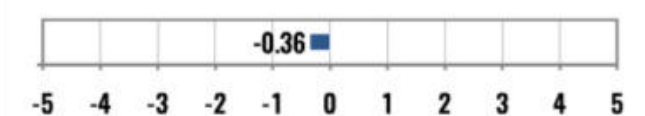
Edge/corner-sharpness looks poor with our test charts, but in 'real-world' shooting at typical focus distances, we found the lens delivered excellent sharpness right out to the extreme corners of the frame.

Fringing



Colour fringing scores are pretty mediocre towards the edges and corners of the frame but, in practice, Nikon's automatic in-camera correction for both JPEG and Raw files takes any shortcomings out of the equation.

Distortion



The distortion score is amazingly good for an ultra-wide-angle lens, again based on shooting a test chart at very close range. In real-world shooting, the lens behaves like an almost zero-distortion optic.

N-Photo verdict

Surely there's some kind of optical wizardry going on here. If you're accustomed to ultra-wide-angle zooms, you'll know they're big, chunky lenses. By contrast, this Voigtlander shoehorns an immense field of view into an unfeasibly small package. Although it has electronic communication with Nikon Z-system camera bodies, it's a manual focus lens, but that's not really a problem due to the huge depth of field. It's beautifully built and delivers excellent image quality.





Nikon Z Teleconverter TC-1.4x

£579/\$549 www.nikon.co.uk

The TC-1.4x aims to boost telephoto reach without compromising performance

Historically, teleconverters have been notorious for degrading image quality. It's like holding a magnifying glass to the lens, accentuating every slight flaw in optical performance. The speed and accuracy of autofocus can also take a hit. However, Nikon says its Z-mount teleconverters won't degrade image quality. Let's see...

With the TC-1.4x, you get a 1.4x boost in reach with the caveat that you lose an f-stop in aperture brightness. So a 70-200mm f/2.8 lens effectively becomes a 98-280mm zoom with a constant f/4 aperture rating.

Unlike 'dumb' teleconverters that have no electronics, the TC-1.4x enables full data communication between the lens and

camera. The optical line-up is based on six elements in four groups and includes one aspherical element. Nikon's Super Integrated Coating is also applied, to avoid degradation of clarity and to minimize ghosting and flare. The minimum focus distance of the lens remains unchanged when using the teleconverter, so you also get a 1.4x increase in macro magnification.

Build and handling

The TC-1.4x has a black anodized aluminium casing and sturdy metal mounting plates, and comes with a complete set of weather-seals. It's nicely compact and lightweight as well, measuring 72x37mm and weighing 220g. Fluorine coatings on its front and rear

elements repel moisture and grease, and make the outer elements easier to clean.

Throughout our real-world testing, levels of sharpness remained excellent, from one end of the zoom range to the other. There's no visible increase in colour fringing and pincushion distortion is actually reduced.

Optical image stabilization for VR (Vibration Reduction) lenses remains highly effective, and light metering is consistently accurate. We didn't notice any reduction in autofocus speed when using the TC-1.4x.

N-Photo verdict

Compatible with a wide range of Z-system lenses, this teleconverter delivers a 1.4x magnification in overall focal length. It's beautifully engineered with a weather-sealed, anodized aluminium casing and high-quality glass, complete with coatings. Performance is exemplary. It's pricey, but worth every penny if your tele lens comes up short. **N**

PROS Great build quality; superb performance

CONS Quite pricey; 1 f-stop aperture reduction

4.5

Overall

Specifications

NAME: Nikon Z Teleconverter TC-1.4x

Mount: Nikon Z

Full-frame: Yes

Construction: 6 elements in 4 groups

Aperture reduction: 1 f-stop

Dimensions: 72x37mm

(18.5mm from flange)

Weight: 220g

NAME: Nikon Z Teleconverter TC-2.0x

Mount: Nikon Z

Full-frame: Yes

Construction: 8 elements in 5 groups

Aperture reduction: 2 f-stops

Dimensions: 72x50.5mm

(32.5mm from flange)

Weight: 270g

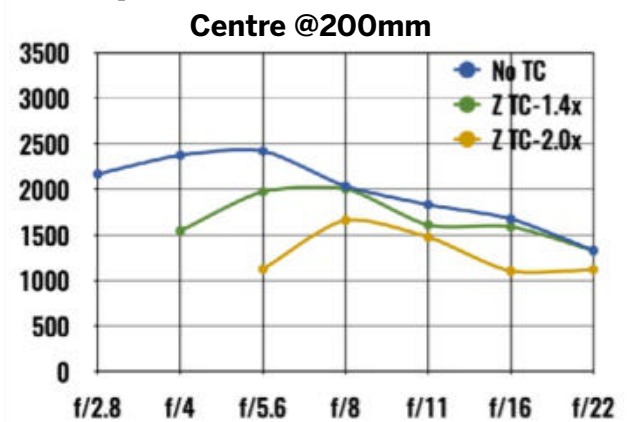


This sequence shot at the long end of a 70-200mm f/2.8 lens shows the magnification effect of no teleconverter, 1.4x giving a focal length of 280mm, and 2x with a 400mm focal length.

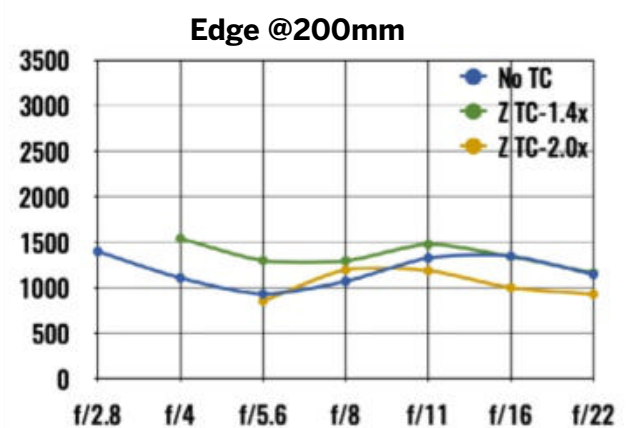


Combined lab results

Sharpness

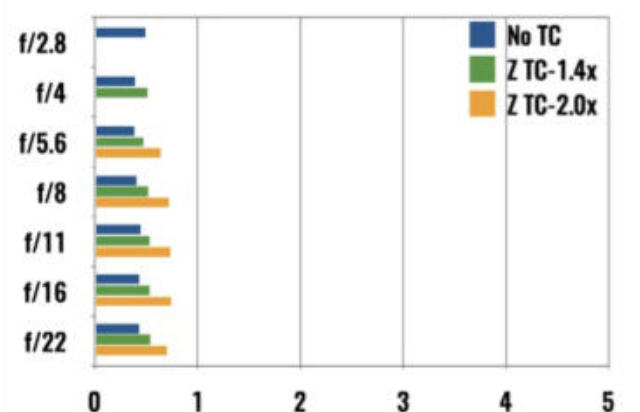


The TC-2.0x has a negative effect at the max f/5.6 aperture but stop down and sharpness reduction is less noticeable. While sharpness is also reduced with the TC-1.4x, there's barely any difference at narrower apertures.



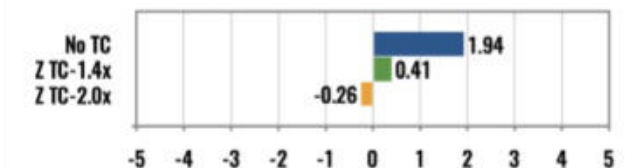
In the corners of frame things get surprising. There is a small sharpness reduction with the TC-2.0x, but barely enough to notice. Switch to the TC-1.4x and corner sharpness is actually improved. Quite an achievement!

Fringing



While both teleconverters technically produce extra chromatic aberration when compared to the results from the host lens alone, the difference is negligible, especially when using the 1.4x converter.

Distortion



With no teleconverter, the Z 70-200mm f/2.8 VR S produces moderate pincushion distortion. But add the TC-1.4x and this is almost eliminated. The TC-2.0x adds slight barrel distortion, but it's entirely negligible.

Nikon Z Teleconverter TC-2.0x

£629/\$599 www.nikon.co.uk

The TC-2.0x aims to prove twice as much can be twice as good, not just for bumping up reach

The main feature of any 2.0x teleconverter is naturally its ability to double your telephoto reach. That always comes with a loss in aperture brightness, to the tune of two f-stops, but it can't be helped. As an example, mount it on a 70-200mm f/2.8 lens and you'll get a 140-400mm effective zoom range with a constant f/5.6 aperture. Another key feature is that it doubles the main lens's maximum magnification factor.

The optical line-up is based on eight elements in five groups; that's two extra elements and one more group compared with the Z TC-1.4x. Both teleconverters include an aspherical element.

Build and handling

Build quality mirrors the TC-1.4x, with metal mounting plates, aluminium casing, full weather-seals, and high-tech coatings. It's pretty compact and lightweight as well, measuring 72x50.5mm and 270g, which is only 50g up on the TC-1.4x.

Throughout our real-world testing of the TC-2.0x with a Z 70-200mm f/2.8 VR S, we were impressed with levels of sharpness at all zoom settings. However, we have to

say that towards the long end of the zoom range, the scintillating levels of sharpness became 'merely' very good. The TC-2.0x didn't quite live up to Nikon's claims of no degradation but, compared with other 2.0x teleconverters that we've used in the past for DSLRs, the drop in sharpness proved much less noticeable and the resulting images had plenty of bite. We didn't spot any visible increase in colour fringing, while distortion is actually reduced.

N-Photo verdict

The Z TC-2.0x doubles the reach of most Nikon Z-system telephoto lenses while adding very little to their size and weight. As usual, you lose a couple of f-stops in aperture brightness but image quality and all-round performance remain very good. While the TC-2.0x is pretty pricey, it's a massive saver in expense as well as size and weight, compared with doubling up on telephoto lenses. **N**

PROS Remarkable performance; doubles reach

CONS Expensive; 2 f-stops of aperture reduction

4.5 Overall



Portrait primes

Ready for your close-up? This month we're focusing on perfect primes for portraiture and a whole lot more besides, so you can buy the best in this versatile genre

F

Fast, short telephoto primes are often referred to as 'portrait lenses'. An 85mm focal length on a full-frame camera enables a comfortable working distance for head-and-shoulders or half-length portraits, so you can be close enough to engage with your subject but without invading their personal space. A longer 105mm or 135mm focal length gives the same advantage for close-up headshots, or the option of a more generous working distance. If you're shooting with a DX (APS-C format) camera, the 1.5x crop factor often makes a 50mm to 56mm focal length more ideal, equating to 75mm or 84mm in

full-frame terms. We'll be covering some top choices for those as well. A bright aperture, typically of around f/1.4 to f/1.8, has two advantages. Firstly, you can get a tight depth of field for blurring fussy backgrounds, to isolate the main subject in a portrait. Secondly, you can maintain reasonably quick shutter speeds even under dull or indoor lighting, without bumping up your camera's ISO setting. This freezes motion while optimizing image quality.

Portraiture is just the tip of the iceberg. This type of lens can be really useful for still life, action, wildlife photography, landscapes or pretty much anything you can think of. It's an incredibly versatile bit of kit. →

The contenders

1	Nikon AF-S 85mm f/1.8G	£489/\$477
2	Nikon Z 85mm f/1.8 S	£699/\$697
3	Sigma 85mm f/1.4 DG HSM Art	£929/\$1199
4	Sigma 105mm f/1.4 DG HSM Art	£1249/\$1599
5	Nikon AF-S 85mm f/1.4G	£1699/\$1447
6	Nikon AF-S 105mm f/1.4E ED	£2099/\$2097
7	Nikon Z 135mm f/1.8 S Plena	£2699/\$2497
8	Nikon Z 85mm f/1.2 S	£2819/\$2797



Nikon

AF-S 85mm f/1.8G

£489/\$477

Compact, lightweight and relatively affordable, this trusty lens is an old favourite and has certainly stood the test of time



There's a lot to be said for compact lenses that don't take up too much room in your kit bag. This one fits the bill perfectly, weighing in at just 350g. That's less than a third of the weight and not much more than half the physical length of the Sigma 85mm f/1.4 lens on test. It's also refreshingly inexpensive for an own-brand Nikon lens.

The lens was originally launched 12 years ago and has built quite a fan base, picking up the baton from the AF 85mm f/1.8D, which was released nearly 20 years earlier. The high-quality optical path is based on nine elements, although there are no aspherical nor ED (Extra-low Dispersion) elements.

Build quality is good, with a sturdy feel and a rubber weather-seal on the mounting plate. Typical of its age, the lens

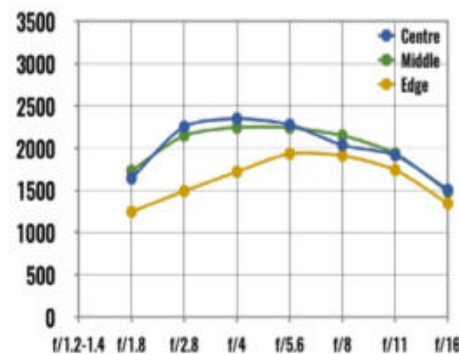
features a fast, ring-type ultrasonic autofocus system, complete with a physical focus distance scale. Autofocus is quick and snappy for stills but less suitable for video. The aperture is mechanically controlled and therefore compatible with Nikon's entire back catalogue of DSLRs. However, it's the only lens in the group with seven diaphragm blades, rather than the more usual nine that you tend to find in 85mm primes.

Performance

This lens boasts impressive sharpness across most of the frame, apart from in the extreme corners at very wide apertures. Bokeh is impressively smooth and, despite only having seven diaphragm blades, points of light remain fairly well-rounded when stopping down a little. Simple but effective, this lens

delivers excellent image quality in all respects and is comfortably compact. It's a really cost-effective portraiture lens. All things considered, it's a great own-brand Nikon option for those of us still using DSLRs rather than mirrorless cameras. At the price, you can't go wrong.

Sharpness



Features

- 1 The lens has an 'effective' focal length of 127.5mm on DX cameras with their APS-C format image sensors.
- 2 Nikon's long-standing Super Integrated Coating is applied to reduce internal reflections and minimize ghosting and flare.
- 3 Autofocus is fully internal, so the front element neither extends nor rotates.
- 4 It has a physical focus distance scale, mounted beneath a viewing window.
- 5 The lens is lightweight but feels well built, with the inclusion of a rubber weather-seal ring.

How we test

We combine real-world shooting with range of lab tests



To test real-world performance, we use lenses in all sorts of lighting conditions, for indoor and outdoor shooting scenarios. We check for good build quality and handling, smooth and precise operation of all controls, and we test the speed and accuracy of autofocus. We typically test full-frame compatible lenses on a range of FX and DX bodies, whereas APS-C format lenses are just tested on DX cameras. These include DSLRs like the D850 and D7500, and mirrorless cameras like the Z 7II and Z fc.

In-camera and Raw processing corrections for chromatic aberration, distortion and vignetting

are disabled where possible, throughout lab-testing, to better reveal the true optical performance of each lens. In our lab, we test lenses under controlled conditions, shooting specialist test charts and processing the results with the Imatest Master and DxO Analyser suites. Test shots are taken across the range of apertures and zoom settings (where applicable), then analysed for sharpness, chromatic aberrations (colour fringing) and distortion. We judge the overall performance by taking real-world testing and lab tests into account.

Nikon Z 85mm f/1.8 S

£699/\$697

There's nothing second-best about this Z-mount prime; it ticks all the right boxes for portraiture and much more



When it comes to fast primes, f/1.8 lenses are often seen as poor relations to their f/1.4 and even f/1.2 counterparts. They tend to be less expensive to buy, mostly because the narrower maximum aperture only requires smaller diameter glass elements. Naturally, you can't get quite such a tight depth of field, and shutter speeds under low lighting will be two-thirds of a stop slower at any given ISO, but that's not the whole story.

This Z-system lens has a high-quality optical path that includes two ED (Extra-low Dispersion) elements for maximizing clarity and reducing unwanted aberrations, along with high-tech Nano Crystal Coat for cutting ghosting and flare. There are no aspherical elements in the optical layout but this can sometimes be a bonus for bokeh – the

all-important quality of defocused areas within images.

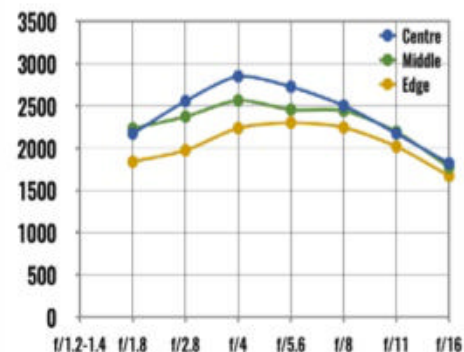
Up-market build quality includes comprehensive weather-seals and autofocus is courtesy of a quick yet virtually silent stepping motor. As usual for Z-system lens, the electronically coupled control ring enables high-precision manual focusing and can also be used for adjusting the likes of aperture and exposure compensation. Alternative functions can be set via the host camera's menu system.

Performance

Sharpness across the entire frame, along with contrast and clarity, are really impressive even when shooting wide-open. Meanwhile, bokeh is beautiful and noticeably smoother than from Nikon's faster AF-S 85mm f/1.4G. In particular, the Z-system lens produces more well-rounded 'bokeh discs' from

defocused points of light. Resistance to ghosting and flare is also very good indeed. Sure, it's pricey for an f/1.8 lens but handling and image quality are excellent. Full-frame Z-series bodies also add the bonus of highly effective stabilization.

Sharpness



Features

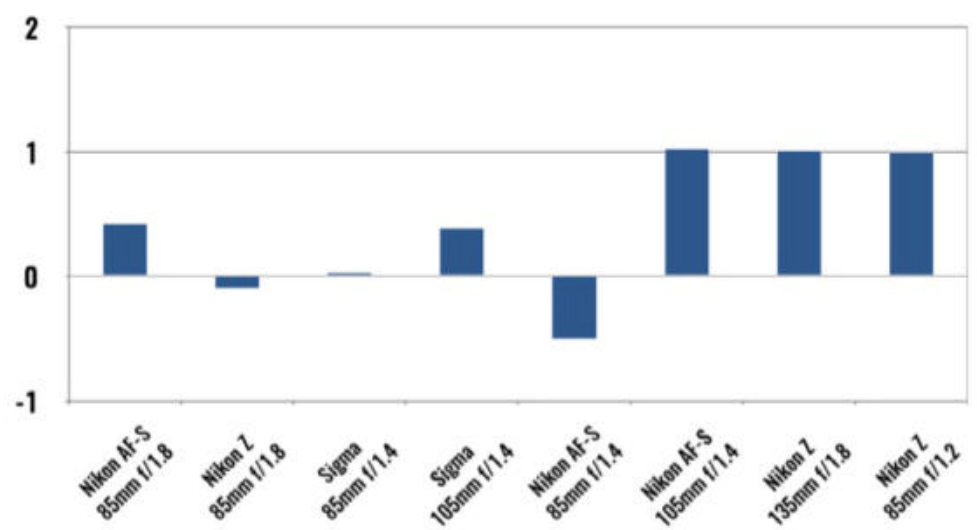
- 1 The inclusion of both Nano Crystal Coat and Super Integrated Coating fend off ghosting and flare.
- 2 The manual focus control ring runs nearly the length of the lens and can be customized for other functions.
- 3 The single switch on the lens toggles autofocus and manual focus modes.
- 4 It weighs in at 470g and has the same 67mm filter attachment thread as the AF-S 85mm f/1.8G
- 5 As with other Nikon lenses in the test group, this one is supplied with a bayonet-fit hood and a carrying pouch.

Distortion

There's very little distortion to speak of

The Nikon Z 85mm f/1.8 S and Sigma 85mm f/1.4 Art come closest to being 'zero distortion' lenses. Most short telephoto primes tend to produce slight pincushion distortion, which can be taken care of with automatic in-camera correction or at the editing stage.

The same goes for correcting the Nikon AF-S 85mm f/1.4G, which produced slight barrel distortion in our lab tests. All in all, even the 'worst' offenders based on shooting lab test charts produce levels of distortion that you wouldn't really notice in real-world shooting.



Sigma

85mm f/1.4 DG HSM Art

£929/\$1199

Redesigned for Sigma's 'Global Vision' range, this is an Art-class lens that's typically hefty gut goes large on image quality



Unusually large and heavy for an 85mm f/1.4 lens, this full-frame compatible, F-mount Sigma weighs in at 1130g. That's getting on for twice the weight of the directly competing Nikon AF-S 85mm f/1.4G on test. Typical of Sigma's Art series, the design is firmly focused on image quality without any concessions to reducing size and weight. A telltale sign of its extra girth is that the Sigma has an 86mm filter attachment thread, compared with the Nikon's 77mm.

Despite not having an optical image stabilizer, the optical path is long and complex, based on 14 elements. These include an aspherical element at the rear and two SLD (Special Low Dispersion) elements, placed at the centre and towards the front. The aim is to boost sharpness and clarity while

reducing colour fringing and other aberrations.

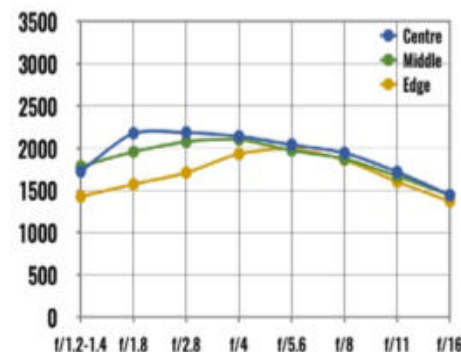
Typically for a lens designed for DSLRs, autofocus is based on a ring-type ultrasonic system, with the usual mechanically linked, full-time manual override and a focus distance scale. Sigma's Art lenses are all immaculately well-built and, unlike some of them, this one adds the bonus of weather-seals.

Performance

Autofocus is both fast and accurate. Sharpness across the entire image frame is highly impressive, even when shooting wide-open where it eases ahead of all the competing Nikon AF-S 85mm f/1.4G. We've noticed a little 'onion ring' effect in the bokeh of some Sigma Art lenses but it's particularly negligible in the 85mm, and bokeh remains silky-smooth when stopping down, helped

by a well-rounded nine-blade diaphragm. With similar image quality to the Nikon Z 85mm, and a faster aperture rating, this is a great portrait lens for FX format DSLRs. The fast f/1.4 aperture rating is a bonus for achieving a satisfying tight depth of field.

Sharpness



Features

- 1 The electromagnetically controlled aperture diaphragm enables consistent accuracy.
- 2 It includes Sigma's 'Thermally Stable Composite' and a plated brass mounting plate, with multiple weather-seals.
- 3 The lens is compatible with Sigma's optional USB Dock, for fine-tuning and firmware updates.
- 4 Sigma's usual Super Multi-Layer Coating is applied to minimize ghosting and flare with backlit shooting.
- 5 The lens comes complete with a petal shaped hood and a padded soft case.

Viltrox AF 56mm f/1.4 Z

£269/\$349

An 'effective' 84mm focal length on Z DX format bodies

RATING: 4.5/5

Viltrox makes a trio of 23mm, 33mm and 56mm autofocus lenses for Z DX cameras, all with a fast f/1.4 aperture rating. They're all pretty much the same size and weight, and have the same 52mm filter attachment thread. The barrel as well as the mounting plate is made from metal, and the lenses feature an aperture control ring. Further

similarities include ED and HR elements, along with an HD Nano multi-layer coating. Centre-sharpness remains excellent even when shooting wide-open and, while corner-sharpness drops off a bit, that's not generally an issue for portraiture. Bokeh is soft and dreamy. Overall, build quality, handling and performance are excellent.



There's no locking switch on the aperture control ring so you need to be a little careful not to nudge it from its Auto position.



Sigma 105mm f/1.4 DG HSM Art

£1249/\$1599

Sigma's supersized portrait prime is weighty, even considering the combination of 105mm focal length and fast f/1.4 aperture

Sigma's 85mm Art lens is quite a handful but this one is about the same weight as a 70-200mm f/2.8 zoom, at 1645g. Nicknamed the 'bokeh master' it goes long on focal length and extra-large in construction. Telltale signs include an oversized 105mm filter thread, due to the large diameter of the forward-most optical elements.

Unlike other lenses in the group, this one is supplied complete with a tripod mounting ring to more evenly balance the weight. That's particularly useful when shooting in portrait (upright) orientation with a tripod or monopod, as it stops the centre of gravity shifting to the side of the head.

Imposing from the outside, the lens has premium components on the inside, including three top-grade FLD

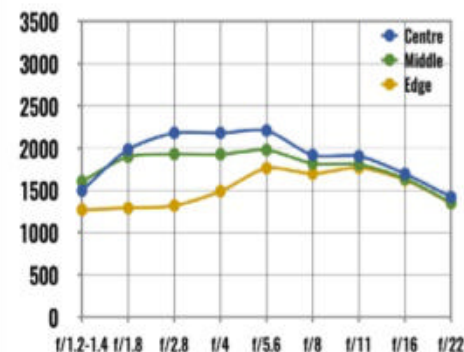
('Fluorite' Low Dispersion) elements, two SLD (Special Low Dispersion) elements, and one aspherical element. As with the Sigma 85mm lens on test, fine-tuning and firmware updates are available via Sigma's optional USB Dock, but this larger lens lacks weather-seals. It does, however, add a fluorine coating to the front element, to repel moisture and greasy finger-marks, and making it easier to clean. Again, the 105mm uses Thermally Stable Composite in its construction, which has a similar expansion coefficient to the lens's metal parts.

Performance

Living up to its claims, axial and lateral chromatic aberrations are very well controlled, while bokeh is beautifully soft and smooth. There's no shortage of sharpness on tap either, although the competing Nikon

F-mount 105mm is very marginally sharper at the centre of the frame. Either way, sharpness can be very localized, as the ultra-thin depth of field can make the lens difficult to work with and demands very accurate focusing.

Sharpness



Features	<div style="width: 90%; background-color: red;"></div>
Build & handling	<div style="width: 85%; background-color: red;"></div>
Performance	<div style="width: 95%; background-color: red;"></div>
Value	<div style="width: 80%; background-color: red;"></div>
4.5	Overall

Features

- 1 The electromagnetically controlled aperture diaphragm is incompatible with a few older DSLRs.
- 2 The circular hood is made of carbon fibre-reinforced plastic, but that makes little difference to its weight.
- 3 The tripod mounting ring has a mounting foot that's Arca-Swiss compatible.
- 4 The plated brass mounting plate has a rubber sealing ring, but no other weather-seals are featured.
- 5 Typical of lenses with ring-type ultrasonic autofocus, this one has a focus distance scale mounted beneath a viewing panel.

7Artisans 50mm f/1.05 Z **£319/\$399**

This full-frame compatible Z-mount lens shines in brightness

RATING: 4/5

Ultra-fast primes tend to be hefty lenses with eye-watering price tags. This 7Artisans lens bucks the trend, shoehorning a phenomenally fast f/1.05 aperture into a compact 61x86mm package that weighs a mere 606g. It's a manual-focus optic and lacks any built-in electronics, so you need to adjust the aperture via an onboard,

stepless control ring instead of from the host camera. Even so, it features two ULD (Ultra Low Dispersion) elements and a sturdy metal barrel. The lens delivers crisp image quality even wide-open at f/1.05, along with smooth and creamy bokeh. Bokeh disks from defocused lights retain a circular shape well when stopping down.



The lack of autofocus isn't a complete deal breaker. The focus peaking option of Z-system cameras helps to nail accurate focusing.

Nikon AF-S 85mm f/1.4G

£1699/\$1447

Compared with many an 85mm f/1.4 prime, this Nikon lens is relatively compact, lightweight and easy to live with, but is pricey



This Nikon lens is much smaller and little more than half the weight of the competing Sigma 85mm f/1.4 on test, but much more expensive. It's only natural to feel you're not getting as much for your money. The optical path consists of 10 elements, compared with the Sigma's 14, and the forward elements have a considerably smaller diameter. As with the Nikon AF-S 85mm f/1.8 lens on test, there are neither aspherical nor ED elements in the line-up.

On the plus side, the Nikon's relatively compact and lightweight build make it somewhat easier to manage. Weighing 595g, there are no real problems when using a tripod and shooting in portrait orientation, without a tripod mounting ring or L-bracket. Autofocus is typically quick and quiet for a ring-type ultrasonic

system, and the mount has a weather-seal ring. Nano Crystal Coat is applied to minimize ghosting and flare.

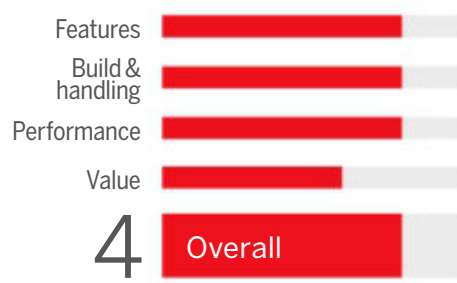
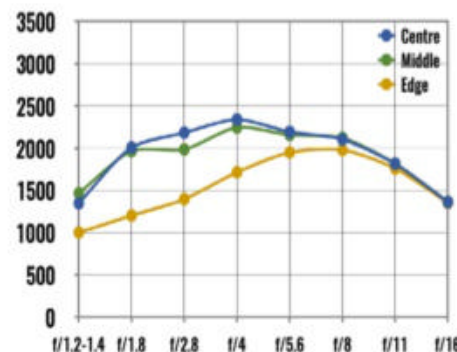
Unlike the Nikon E-type lenses and the two Sigma lenses, this and most other Nikon F-mount lenses on test have a mechanical linkage for aperture control. As such, they're compatible with older DSLRs, including the D3000 and D5000 as well as D1 and D2 series cameras.

Performance

Shooting wide-open, sharpness drops off rather noticeably compared with other f/1.4 lenses in the group. Meanwhile, bokeh is a little fidgety and less smooth than with other f/1.4 lenses on test, but there's only minor degradation when stopping down a little. It's a fine lens but not really that much better than the Nikon AF-S 85mm f/1.8G and lags behind

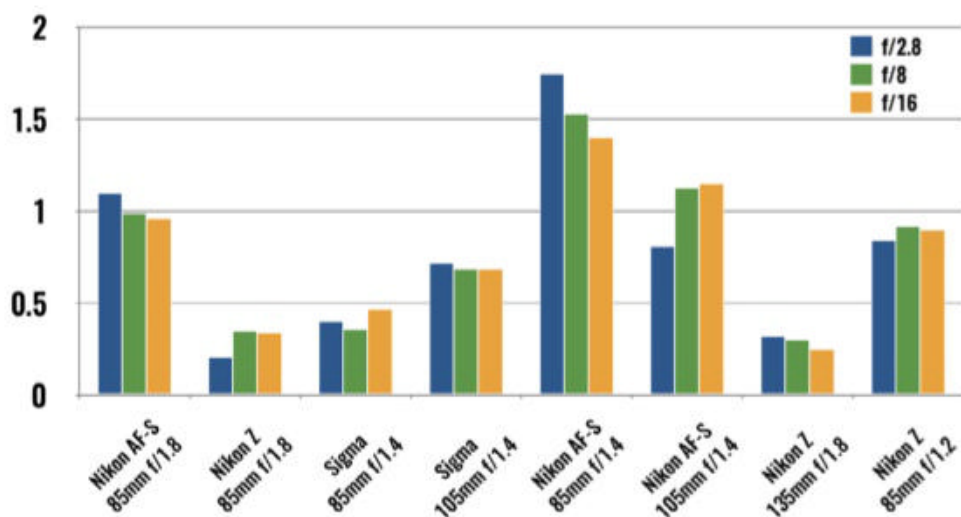
the directly competing Sigma for overall image quality. All things considered, it's a very good lens but certainly isn't particularly good value at the price. Unless you feel a burning desire for its faster f/1.4 aperture, the Nikon AF-S 85mm f/1.8G is more cost-effective.

Sharpness



Features

- 1 Nano Crystal Coat and Super Integrated Coating are used in the optical path to cut ghosting and flare.
- 2 An M/AM focus mode switch is featured, the former option delivering autofocus with priority to manual override.
- 3 Based on nine rather than seven blades, the aperture diaphragm is more well-rounded than that of the Nikon AF-S 85mm f/1.8G.
- 4 The ring-type ultrasonic autofocus system is quick and virtually silent for stills.
- 5 Compactness and a lightweight construction feature on this f/1.4 lens.



Colour fringing

Control over fringing is generally good

Lateral chromatic aberration tends to be more problematic towards the edges and corners of the image frame, whereas axial/longitudinal chromatic aberration can occur anywhere in the frame. Our lab tests reveal the extent of lateral chromatic aberration.

All the portrait primes featured in this group do well to minimize the effect, but the Nikon AF-S 85mm f/1.4G is technically the least impressive. The best on test are the Nikon Z 85mm f/1.8 S, Sigma 85mm f/1.4 Art and Nikon Z 135mm f/1.8 S Plena.

Nikon AF-S 105mm f/1.4E ED

£2099/\$2097

This 105mm f/1.4 lens is more manageable than the competing Sigma in size and weight but considerably pricier to buy. Spot a theme?



Shorter, slimmer and less than two-thirds the weight of Sigma's upscaled 105mm lens, this Nikon has an identical focal length and aperture rating. It's more manageable for handheld shooting, although the purchase price is more difficult to swallow. Unlike in the two Nikon 85mm F-mount lenses on test, this one has ED elements (three of them) in the optical path, while sharing the f/1.4 lens's Nano Crystal Coat.

As with the Sigma, an incredibly tight depth of field is available. In the context of portraiture, you can have sharpness for a single eye and even the eyelashes will be blurred. You're best off shooting with a tripod, for the sake of focusing accuracy, at which point the Sigma is better balanced as it can rotate for portrait-orientation shooting

in its mounting collar. That said, the Nikon lens's lighter weight of 985g makes it perfectly usable on a tripod without a mounting collar.

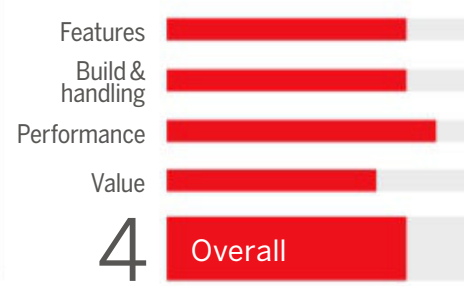
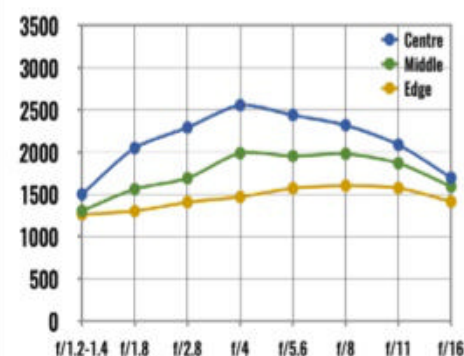
Unlike the other Nikon F-mount lenses on test, this one has an electromechanically controlled aperture diaphragm. A bonus is that aperture settings can be more consistently accurate, especially when shooting in high-speed continuous drive mode. The downside, however, is that it's incompatible with some older cameras, only enabling you to shoot at the widest aperture of f/1.4.

Performance

Levels of sharpness across the frame are very similar to those from the Sigma 105mm lens. Again, bokeh is beautiful but marginally less smooth than from the Sigma, with slightly more axial fringing in evidence.

It doesn't quite reign supreme for bokeh, as the competing Sigma 105mm does a slightly better job and costs less to buy. Even so, it's a cracking lens. The focal length works particularly well for tight head-and-shoulder portraits, without invading the personal space of your subject.

Sharpness



Features

- 1 The optical design gives rise to slightly noticeable axial chromatic aberration.
- 2 The focus mechanism is internal, so the front element neither extends nor rotates during focusing.
- 3 It uses Nano Crystal Coat to reduce ghosting and flare, and a fluorine coating on front and rear elements.
- 4 Incompatibility issues with the electromagnetically controlled aperture diaphragm don't affect full-frame DSLRs, just some older DX DSLRs.
- 5 A rubber weather-seal ring has been fitted to the mounting plate.

Yongnuo YN85mm f/1.8Z DF DSM **£365/\$379**

A smart choice for Z-system cameras if you're on a tight budget

RATING: 4.5/5

If you're in the market for a particularly budget-friendly portrait prime, there's a lot to be said for this lens. Yongnuo also makes a very similar 50mm f/1.8 lens, which is again full-frame compatible but a better fit for portraiture on DX format Z-system cameras. Both feature one LD (Low Dispersion) element and nano-structure

multi-coatings. The 85mm also adds an HR (High Refractive index) element in its optical path. They have a chrome-plated metal mounting plate and weather-seal ring, gold-plated electronic contacts and a USB port for firmware updates. Sharpness is excellent even wide-open, while bokeh is much smoother than from the Yongnuo 50mm lens.



A nice touch, so to speak, is the customizable autofocus hold button, which you can assign to other functions.

Nikon Z 135mm f/1.8 S Plena

£2699/\$2497

Built for bokeh, the Z 135mm 'Plena' takes defocused areas within compositions and turns them into something truly exquisite



One of Nikon's very latest lenses, this one shows the heights to which the Z system can aspire. The optical path incorporates 16 elements in total and includes four ED (Extra-low Dispersion) elements, one aspherical element and one SR (Short-wavelength Refractive) element. Nikon's ED glass has long been renowned for delivering excellent sharpness, contrast and colour accuracy, even at wide apertures, while reducing chromatic aberrations. SR glass further reduces chromatic aberration at the blue end of the spectrum, while the use of an aspherical element can also reduce aberrations as well as the physical size of a lens.

High-tech ARNEO coating is on hand to keep ghosting and flare to an absolute minimum, with the addition of a new Meso

Amorphic Coat, which further reduces reflections from light entering the lens from any angle. The overall optical design aims for excellent sharpness across the whole frame, along with particularly beautiful bokeh. To help achieve this, a well-rounded 11-blade aperture diaphragm helps to maintain top-quality bokeh when stopping down.

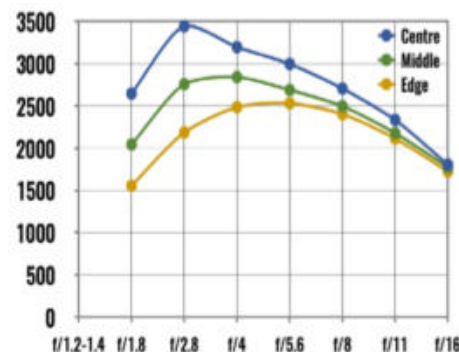
Handling refinements include dual customizable L-fn (Lens function) buttons, the action being duplicated for landscape or portrait orientation shooting. Autofocus-hold is a top candidate for the assigned function. There's also a secondary customizable control ring, in addition to the customizable focus ring.

Performance

Levels of sharpness, clarity and contrast are spectacular, even wide-open at f/1.8, where axial

chromatic aberration is very negligible – always a challenge for 'fast glass'. Naturally, it's not just about sharpness, as the quality of bokeh can be an even more important consideration. The Plena comes into its own here, with utterly gorgeous, super-smooth bokeh.

Sharpness



Features

- 1 Bokeh is stunningly smooth wide-open at f/1.8 and remains excellent when stopping down.
- 2 A second customizable control ring works well for aperture control, exposure compensation and ISO.
- 3 Autofocus is particularly fast, based on two linear stepping motors, which also enable smooth and virtually silent autofocus transitions for video.
- 4 The construction includes a full set of weather-seals.
- 5 The Plena optical layout puts the smoothness of bokeh on an equal footing to edge-to-edge sharpness.

Sigma 56mm f/1.4 DC DN | C £449/\$499

This Sigma lens looks deceptively simple but is a good performer

RATING: 4/5

This is one of Sigma's trio of 16mm, 30mm and 56mm fast f/1.4 primes for DX format mirrorless cameras. Like the competing Viltrox lens, the 56mm has an effective focal length of 84mm in full-frame terms. Typical of Sigma's Contemporary line-up of lenses, it's designed to be compact and lightweight. It's remarkably small for a 56mm

lens with an f/1.4 aperture and weighs just 280g, making it a perfect match for Z DX bodies. The optical layout has an aspherical element and a hybrid 'Aspherical SLD' (Special Low Dispersion) element. The latter aims to minimize axial chromatic aberration. Levels of sharpness are very good and bokeh is beautifully soft.



This Sigma is an attractive Z-mount DX lens but it's rather pricey compared with its direct Viltrox competitor (see page 100).



Nikon

Z 85mm f/1.2 S

£2819/\$2797

This super-fast 85mm f/1.2 lens goes into overdrive for portraiture. It's expensive but what price perfection?

There's certainly nothing wrong with the budget-friendly Nikon Z 85mm f/1.8 S but it lacks an ultra-bright aperture, often favoured by portrait photographers for getting a really tight depth of field. With that in mind, Nikon bypassed the usual f/1.4 category and launched the super-speed Z 85mm f/1.2, its aperture making it a full f/stop faster than an f/1.8 lens.

Wide apertures necessarily mean wide-diameter glass. As such, the lens is quite chunky and weighs in at 1160g. Even so, it's pretty much the same weight as the Sigma F-mount 85mm f/1.4 lens on test and actually has a smaller 82mm filter thread, compared with the Sigma's 86mm. Similarities to the Z 135mm Plena lens include super-fast autofocus based on two linear stepping motors, and a customizable L-fn button,

although the button isn't doubled up this time for landscape/portrait orientation shooting. The same goes for the additional control ring, which can be assigned to functions like stepless aperture adjustment, exposure compensation and ISO sensitivity. However, unlike in some top-grade S-line lenses, neither lens has an OLED info display screen.

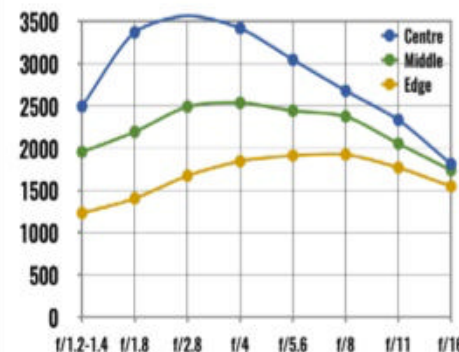
The optical layout includes two aspherical elements and one ED element, along with Nano Crystal Coat and a particularly well-rounded 11-blade aperture diaphragm. Again, the lens is extensively weather-sealed.

Performance

Even wide-open at f/1.2, sharpness is stellar where you want it, even if that's well away from the centre of the image frame. That's no mean feat for

such a 'fast' lens, and the same is true for suppression of axial chromatic aberration. Equally important, bokeh is lusciously soft and creamy. Bokeh disks remain well-rounded when stopping down a little. All in all, it's a spectacular lens but you'll need deep pockets to buy it.

Sharpness



Features	████████████████████
Build & handling	████████████████████
Performance	████████████████████
Value	██████████████████
5	Overall

Features

- 1 The eye-detection autofocus mode of Z-system cameras helps keep accuracy consistent.
- 2 There's an additional L-fn button and control ring, which can be customized via in-camera menus.
- 3 The 11-blade aperture diaphragm helps to retain well-rounded bokeh disks.
- 4 Aspherical and ED elements in the optical path help to correct for chromatic aberrations, distortion and coma.
- 5 Autofocus is smooth for video and focus breathing is minimized – bonuses for videographers.

Sigma 135mm f/1.8 DG HSM Art **£1099/\$1399**

The same focal length and aperture as the Plena, but for DSLRs

RATING: N/A

The 135mm f/1.8 DG HSM Art from Sigma's Global Vision range of lenses is available in F-mount, catering to both full-frame and DX format DSLRs, giving an effective focal length of just over 200mm on the latter. Like the two Sigma Art lenses in our main reviews, this one is beautifully built, using the same materials and

is typically chunky, measuring 91x115mm and weighing 1130g. The high-grade optical design includes two FLD ('Fluorite' Low Dispersion) and two SLD (Special Low Dispersion) elements, along with Sigma's Super Multi-Layer Coating and an electromagnetically controlled nine-blade aperture diaphragm.



It's recently been discontinued so, if you want one, you'll need to snap it up quickly while there are still some in the supply chain. →

The winner is... Nikon Z 135mm f/1.8 S Plena



The Plena is more than just a perfect portrait prime

We've become very well accustomed to testing fabulous Z-mount lenses from Nikon, with levels of sharpness akin to a surgical scalpel. But the Plena is about more than that. It has an uncanny knack of combining supreme sharpness, contrast and clarity with the most wonderfully dreamy bokeh, plus a really natural-looking roll-off in the transition between focused and defocused areas. It's not just our top

choice of portrait lens, but one of our absolute favourite Nikon lenses of all time. The only drawback is that its 135mm focal length can be a little long for some portrait compositions. In that case, look no further than the super-fast Nikon Z 85mm f/1.2 S. On a tighter budget for Z-system cameras, the Nikon Z 85mm f/1.8 S punches well above its weight for a 'humble' f/1.8 prime.

In the F-mount camp of lenses designed with DSLRs in mind, the Sigma 85mm f/1.4

DG HSM Art is our pick of the crop, delivering superb image quality at a reasonable price. The Sigma 105mm f/1.4 DG HSM Art is also excellent but both lenses are comparatively big and weighty. The competing Nikon AF-S 85mm f/1.4G and Nikon AF-S 105mm f/1.4E ED are relatively compact and lightweight but feel rather overpriced. For shooting with a DSLR, we'd go for the Nikon AF-S 85mm f/1.8G, which is great value at the price. **N**



How the lenses compare

	Nikon AF-S 85mm f/1.8G	Nikon Z 85mm f/1.8 S	Sigma 85mm f/1.4 DG HSM Art	Sigma 105mm f/1.4 DG HSM Art	Nikon AF-S 85mm f/1.4G	Nikon AF-S 105mm f/1.4E ED	Nikon Z 135mm f/1.8 S Plena	Nikon Z 85mm f/1.2 S
Contact	www.nikon.com	www.nikon.com	www.sigma-global.com	www.sigma-global.com	www.nikon.com	www.nikon.com	www.nikon.com	www.nikon.com
Street price (UK, USA)	£489/\$477	£699/\$697	£929/\$1199	£1249/\$1599	£1699/\$1447	£2099/\$2097	£2699/\$2497	£2819/\$2797
Mount	F FX	Z FX	F FX	F FX	F FX	F FX	Z FX	Z FX
Equiv. focal length (DX)	127.5mm	127.5mm	127.5mm	157.5mm	127.5mm	157.5mm	202.5mm	127.5mm
Elements/groups	9/9	12/8	14/12	17/12	10/9	14/9	16/14	15/10
Diaphragm	7 blades	9 blades	9 blades	9 blades	9 blades	9 blades	11 blades	11 blades
Optical stabilizer	No	No	No	No	No	No	No	No
Focus type	Ultrasonic (ring-type)	Stepping motor	Ultrasonic (ring-type)	Ultrasonic (ring-type)	Ultrasonic (ring-type)	Ultrasonic (ring-type)	Stepping motor	Stepping motor
Min focus distance	0.8m	0.8m	0.85m	1.0m	0.85m	1.0m	0.82m	0.85m
Max reproduction ratio	0.12x	0.14x	0.12x	0.12x	0.12x	0.13x	0.2x	0.11x
Filter size	67mm	67mm	86mm	105mm	77mm	82mm	82mm	82mm
Accessories inc	Hood, pouch	Hood, pouch	Hood, soft case	Hood, soft case, tripod ring	Hood, pouch	Hood, pouch	Hood, pouch	Hood, pouch
Diameter x min length	80x73mm	75x99mm	95x126mm	116x132mm	87x84mm	95x106mm	98x140mm	103x142mm
Weight	350g	470g	1130g	1645g	595g	985g	995g	1160g

Features	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Build & handling	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Performance	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Value	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Overall	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★

Back issues

Missed an issue? All our back issues are available digitally and selected issues in print at www.magazinesdirect.com/nph/singleissues

Available on the following platforms:

● **Apple iPad, iPhone or iPod Touch** Get the free *N-Photo* app for your device at www.bit.ly/nphoto_app, which has a 30-day free subs trial, then browse through our back issues or buy a digital subscription using the app.

- **Android, PC or Mac** *N-Photo* is available on the following:
Zinio: www.bit.ly/nphoto_Zinio
Pocketmags: www.bit.ly/nphoto_pocket
- **Other options** *N-Photo* is also available for Kobo, Kindle, Nook. It can be found on the all-you-can read Readly magazine app, and it's available on Magzter, Pocketmags and PressReader.



Issue 159

- 24 photo ideas for 2024
- Flashguns on test
- Street photography



Issue 158

- 25 winter wildlife tips
- The best gear of 2023
- High-speed flash photos



Issue 157

- Nikon Z f full review!
- 20 tips for portrait pics
- How to shoot forests



Issue 156

- Best British landscapes
- Fast tele-zooms on test
- Autumn wildlife



Issue 155

- Autumn landscape tips
- Best mirrorless for you
- Shoot fantasy portraits



Issue 154

- 100 outdoor photo tips
- Filter holder systems
- Birds of prey Apprentice



Issue 153

- Shoot dramatic scenes
- Music photography tips
- Standard zooms on test



Issue 152

- Inspiring travel images
- Shoot summer scenes
- Fast budget Z primes



Issue 151

- Wildlife skills revealed
- Nikon Z 8 review
- Fine art flowers



Issue 150

- 25 landscape tips
- Macro lens test
- Trend-setting portraits



Issue 149

- Master landscape filters
- Wide-angle lens test
- Tasty food photography



Issue 148

- 20 tips for spring shots
- Budget telephoto lenses
- How to shoot flowers

Binders for your print issues

Prefer print? Keep your mags together with our binder, which neatly holds a year's worth of issues. We also sell back issues...



Take an in-depth masterclass

If you're keen to explore a topic in much greater depth, check out our complete range of books, video courses and more!



www.magazinesdirect.com/nph/singleissues

Nikon cameras

The current range of Nikon DSLR, Coolpix & Z-series mirrorless cameras

Current market prices are checked regularly with reputable stores to serve as a guideline. Body-only prices quoted unless stated. Different lens bundles are available. Prices correct at time of going to press.

	Category	Model	Description	Tested In Issue 155 Price
DX DSLRS	Nikon	NIKON D7500	THE D7500 SHOEHORNS the best bits from the now-discontinued pro-grade D500 into a smaller, more affordable body. The control layout makes everything easy to get at, and there's a top-plate info LCD, 51-point autofocus system, fast 1/8000 sec shutter speed and 8fps continuous drive rate. Video resolution stretches to 4K. ★★★★★	TESTED IN ISSUE 155 • £1099/\$897
		NIKON D780	THE D780 TAKES the D750's winning design and handling cues, but adds on-sensor phase-detection autofocus and EXPEED 6 processing, inherited directly from the Z 6. The result is a capable and natural-feeling DSLR for shooting stills in viewfinder mode, coupled with the same kind of performance as a mirrorless camera in live view. ★★★★★	TESTED IN ISSUE 155 • £2299/\$2197
		NIKON D850	THE D850 GOES extra-large in megapixel count with a 45.7Mp image sensor. Further attractions include a high-spec 153-point autofocus system and fairly recent EXPEED 5 processor. For live view and video capture, however, the contrast-detection autofocus system is massively inferior to that of Nikon's mirrorless cameras and the D780. ★★★★★	TESTED IN ISSUE 155 • £2799/\$2497
		NIKON D6	THE D6 HAS the best autofocus module of any DSLR in Nikon's history, based on a 105-point system in which all of the points are cross-type. Eye-detection is also available in 3D tracking mode, and the 14fps burst rate is impressive. The flipside is that the D6 only has a 20.8Mp image sensor. One significant advantage over the Z 9 is a 3,580-shot battery life. ★★★★★	TESTED IN ISSUE 155 • £6799/\$6497
		COOLPIX	NIKON P950	SMALLER & LIGHTER than the P1000, the P950 has broader appeal, but a smaller full-frame equivalent zoom range of 24-2000mm. Like all bridge cameras, image quality is the pay-off for unrivalled versatility. £849/\$797 ★★★★★
NIKON P1000	ANOTHER BRIDGE CAMERA, the P1000 offers a zoom range equivalent to 24-3000mm in full-frame terms, so it's ready for any shooting situation. The camera has a 16Mp sensor and supports Raw photography. £999/\$1097 ★★★★★			
DX Z-SERIES	Nikon	NIKON Z 30	THE Z 30 LOOKS and feels like the Z 50 with the viewfinder lopped off, and the tilting rear screen replaced by the vari-angle screen of the Z fc. The rangefinder style makes the camera about 20mm shorter and 40g lighter. The Z 30 is good value for vloggers, with little difference in image or video quality between it and the Z 50/Z fc. ★★★★★	TESTED IN ISSUE 155 • £649/\$607
		NIKON Z 50	WITH ITS DOWNSIZED DX format image sensor, the Z 50 nevertheless inherits the same oversized lens mount from full-frame Z system bodies. The slimline build makes the most of the mirrorless design ethic. The 20.9Mp image sensor matches the megapixel count of the later Z fc and Z 30. It's a real joy to use, and very travel-friendly. ★★★★★	TESTED IN ISSUE 155 • £899/\$857



DX Z-SERIES

NIKON Z FC



IT'S NOT JUST the retro chic styling that makes the Z fc so alluring. The direct-access shutter speed, exposure compensation and ISO dials, as well as the usual command dial for aperture control, enable a really hands-on approach to creative shooting. It features highly competent people/animal autofocus modes, along with a vari-angle touchscreen. ★★★★★

TESTED IN ISSUE 155 • £899/\$957

Sensor	20.9Mp, DX (5568x3712)
Processor	EXPEED 6
Viewfinder	OLED, 2360k, 0.39-inch, 100%
ISO	100-51,200 (100-204,800 expanded)
AF	209-point
LCD	3-inch, 1040k, vari-angle, touch
Max burst (buffer)	11fps (30-35 Raw)
Memory card	SDXC UHS-I

NIKON Z 5



THE MOST AFFORDABLE FX format mirrorless Nikon, the Z 5 costs much less than the Z 6II, although it lacks a top-panel OLED display. Dual card slots enable instant backups while you shoot. Like all other FX format Z-system cameras, the Z 5 features five-axis IBIS, which is a major plus point over the DX format cameras. ★★★★★

TESTED IN ISSUE 155 • £1349/\$997

Sensor	24.3Mp, FX (6016x4016)
Processor	EXPEED 6
Viewfinder	OLED, 3690k, 0.5-inch, 100%
ISO	100-51,200 (50-102,400 expanded)
AF	273-point
LCD	3.2-inch, 1040k, tilt, touch
Max burst (buffer)	4.5fps (100 Raw)
Memory card	Two SDXC UHS-II

NIKON Z 6II



THE Z 6II HAS a pair of late-generation EXPEED 6 processors, a superb 3690k OLED electronic viewfinder and tilting 2100k touchscreen, as well as an identical control layout to the Z 7II. But with fewer megapixels to process, the Z 6II beats the Z 7II with a 14fps rather than 10fps drive rate, and the buffer holds around twice as many Raw files. ★★★★★

TESTED IN ISSUE 155 • £2069/\$1597

Sensor	24.5Mp, FX (6048x4024)
Processor	Dual EXPEED 6
Viewfinder	OLED, 3690k, 0.5-inch, 100%
ISO	100-51,200 (50-204,800 expanded)
AF	273-point
LCD	3.2-inch, 2100k, tilt, touch
Max burst (buffer)	14fps (19-200 Raw)
Memory card	One XQD/CFexpress, one SDXC UHS-II

NIKON Z F



ITS RETRO DESIGN may be heavily inspired by the classic Nikon FM2 film camera, complete with brass dials for inputting exposure settings, but this stylish full-frame mirrorless Nikon is crammed with the latest tech. With an EXPEED 7 processor at its heart, it has better ISO, AF and subject tracking capabilities than the Z 6II, and a trick pixel-shift mode for super-hi-res images. ★★★★★

TESTED IN ISSUE 157 • £2199/\$1997

Sensor	24.5Mp, FX (6048x4024)
Processor	EXPEED 7
Viewfinder	OLED, 3690k, 0.5-inch, 100%
ISO	100-64,000 (50-204,800 expanded)
AF	299-point
LCD	3.2-inch, 2100k, tilt, vari-angle
Max burst (buffer)	7.8fps Raw (35 Raw), 30fps JPEG
Memory card	One SDXC UHS-II, one MicroSD

FX Z-SERIES

NIKON Z 7II



A MASSIVE 45.7MP super-high-res image sensor and an astonishing 493 phase-detection AF points in its hybrid autofocus system are the chief enhancements over the Z 6II. Dual XQD/CFexpress and SDXC memory card slots are a big bonus over the single XQD slot of the original Z 7, and the bigger memory buffer enables much longer bursts. ★★★★★

TESTED IN ISSUE 155 • £2949/\$2597

Sensor	45.7Mp, FX (8256x5504)
Processor	Dual EXPEED 6
Viewfinder	OLED, 3690k, 0.5-inch, 100%
ISO	64-25,600 (32-102,400 expanded)
AF	493-point
LCD	3.2-inch, 2100k, tilt, touch
Max burst (buffer)	10fps (46-82 Raw)
Memory card	One XQD/CFexpress, one SDXC UHS-II

NIKON Z 8



SHARING THE SAME new-generation EXPEED 7 image processor as the Z 9, the Z 8 is step ahead of the Z 6II and Z 7II, boasting intelligent autofocus recognition and tracking for vehicles in addition to people and animals. Its fully electronic shutter matches the Z 9's 1/32,000 sec max shutter speed and 20-120fps burst rate. ★★★★★

TESTED IN ISSUE 155 • £3789/\$3797

Sensor	45.7Mp, FX (8256x5504)
Processor	EXPEED 7
Viewfinder	OLED, 3690k, 0.5-inch, 100%
ISO	64-25,600 (32-102,400 expanded)
AF	493-point
LCD	3.2-inch, 2100k, v/h tilt, touch
Max burst (buffer)	20fps Raw (79-1000 Raw), 120fps JPEG
Memory card	One XQD/CFexpress, one SDXC UHS-II

NIKON Z 9



HEADLINE ATTRACTIONS INCLUDE shutter speeds up to 1/32,000 sec and a 120fps continuous drive rate in JPEG mode – dropping to 20fps Raws, albeit with a massive 1000-shot buffer. A built-in vertical grip offers duplicated shooting controls, and houses an EN-EL18d battery with sufficient stamina for 700-770 shots. ★★★★★

TESTED IN ISSUE 155 • £4849/\$5497

Sensor	45.7Mp, FX (8256x5504)
Processor	EXPEED 7
Viewfinder	OLED, 3690k, 0.5-inch, 100%
ISO	64-25,600 (32-102,400 expanded)
AF	493-point
LCD	3.2-inch, 2100k, v/h tilt, touch
Max burst (buffer)	20fps Raw (79-1000 Raw), 120fps JPEG
Memory card	Two XQD/CFexpress

Nikon-fit lenses

Your at-a-glance guide to the current crop of Nikon-fit lenses

KEY: ■ BEST ON TEST ■ GOLD AWARD ■ GREAT VALUE ■ Current market prices are checked regularly with reputable stores to serve as a guideline. Prices correct at time of going to press.

	LENS NAME	Price	Mount	DX/FX	Max zoom	Stabilizer	Autofocus	Weight	Min focus	Magnification	Filter size	Aperture blades	Issue reviewed	Rating	Awards
WIDE ZOOMS	Nikon AF-S 8-15mm f/3.5-4.5E ED	£1449/\$1246	F	FX	1.9x	No	Ultrasonic	485g	0.16m	0.34x	None	7	149	★★★★★	
	Nikon AF-P DX 10-20mm f/4.5-5.6G VR	£299/\$308	F	DX	2x	Yes	Pulse	230g	0.22m	0.17x	72mm	7	149	★★★★★	■
	Nikon AF-S DX 10-24mm f/3.5-4.5G ED	£949/\$900	F	DX	2.4x	No	Ultrasonic	460g	0.24m	0.2x	77mm	7	77	★★★★★	
	Nikon AF-S 14-24mm f/2.8G ED	£1619/\$1749	F	FX	1.7x	No	Ultrasonic	1000g	0.28m	0.15x	None	9	122	★★★★★	
	Nikon AF-S 16-35mm f/4G ED VR	£1149/\$1097	F	FX	2.5x	Yes	Ultrasonic	680g	0.28m	0.25x	77mm	9	149	★★★★★	
	Nikon Z DX 12-28mm f/3.5-5.6 PZ VR	£299/\$357	Z	DX	2.3x	Yes	Stepping	205g	0.19m	0.21x	67mm	7	152	★★★★★	
	Nikon Z 14-24mm f/2.8 S	£2169/\$2497	Z	FX	1.7x	No	Stepping	650g	0.28m	0.13x	112mm	9	149	★★★★★	■
	Nikon Z 14-30mm f/4 S	£1069/\$1347	Z	FX	2.1x	No	Ultrasonic	485g	0.28m	0.16x	82mm	7	149	★★★★★	■ ■
	Nikon Z 17-28mm f/2.8	£1009/\$1200	Z	FX	1.65x	No	Stepping	450g	0.19m	0.19x	67mm	9	145	★★★★★	■ ■
	Sigma 12-24mm f/4 DG HSM A	£1259/\$1299	F	FX	2x	No	Ultrasonic	1150g	0.24m	0.2x	None	9	149	★★★★★	
STANDARD ZOOMS	Sigma 14-24mm f/2.8 DG HSM A	£1169/\$1299	F	FX	0.19x	No	Ultrasonic	1150g	0.26m	0.19x	None	9	149	★★★★★	■ ■
	Tokina atx-i 11-16mm f/2.8 CF Plus	£480/\$449	F	DX	1.5x	No	Electric	555g	0.3m	0.09x	77mm	9	32	★★★★★	
	Tokina atx-i 11-20mm f/2.8	£500/\$529	F	DX	1.8x	No	Ultrasonic	560g	0.28m	0.12x	82mm	9	135	★★★★★	
	Tokina Opera 16-28mm f/2.8 FF	£700/\$700	F	FX	1.7x	No	Electric	940g	0.28m	0.19x	None	9	101	★★★★★	
	Nikon AF-S 24-70mm f/2.8E ED VR	£1919/\$2400	F	FX	2.9x	Yes	Ultrasonic	1070g	0.38m	0.27x	82mm	9	138	★★★★★	
	Nikon AF-S 24-85mm f/3.5-4.5G ED VR	£579/\$500	F	FX	3.5x	Yes	Ultrasonic	465g	0.38m	0.22x	72mm	7	88	★★★★★	
	Nikon AF-S 24-120mm f/4G ED VR	£1069/\$1097	F	FX	5x	Yes	Ultrasonic	710g	0.45m	0.24x	77mm	9	153	★★★★★	
	Nikon Z DX 16-50mm f/3.5-6.3 VR	£329/\$307	Z	DX	3.1x	Yes	Stepping	135g	0.2m	0.2x	46mm	7	153	★★★★★	
	Nikon Z 24-50mm f/4-6.3	£449/\$397	Z	FX	2x	No	Stepping	195g	0.35m	0.17x	52mm	7	153	★★★★★	
	Nikon Z 24-70mm f/2.8 S	£1899/\$2300	Z	FX	2.9x	No	Ultrasonic	805g	0.38m	0.22x	82mm	7	138	★★★★★	■ ■
TELEPHOTO ZOOMS	Nikon Z 24-70mm f/4 S	£949/\$997	Z	FX	2.9x	No	Stepping	500g	0.3m	0.3x	72mm	7	153	★★★★★	
	Nikon Z 24-120mm f/4 S	£899/\$1097	Z	FX	5x	No	Stepping	630g	0.35m	0.39x	77mm	9	153	★★★★★	
	Nikon Z 28-75mm f/2.8	£849/\$897	Z	FX	2.7x	No	Stepping	565g	0.39m	0.34x	67mm	9	153	★★★★★	■ ■ ■
	Sigma 24-70mm f/2.8 DG OS HSM A	£1149/\$1299	F	FX	2.9x	Yes	Ultrasonic	1020g	0.37m	0.21x	82mm	9	153	★★★★★	
	Sigma 24-105mm f/4 DG OS HSM A	£639/\$899	F	FX	4.4x	Yes	Ultrasonic	885g	0.45m	0.22x	82mm	9	153	★★★★★	■
	Tamron SP AF 24-70mm f/2.8 Di VC USD G2	£1199/\$1200	F	FX	2.9x	Yes	Ultrasonic	905g	0.38m	0.2x	82mm	9	88	★★★★★	
	Nikon AF-S 70-200mm f/2.8E FL ED VR	£2219/\$2350	F	FX	2.9x	Yes	Ultrasonic	1430g	1.1m	0.21x	77mm	9	156	★★★★★	■
	Nikon AF-P 70-300mm f/4.5-5.6E ED VR	£589/\$597	F	FX	4.3x	Yes	Ultrasonic	680g	1.2m	0.25x	67mm	9	148	★★★★★	■
	Nikon AF-S 80-400mm f/4.5-5.6G ED VR	£2299/\$2297	F	FX	5x	Yes	Ultrasonic	1570g	1.5m	0.2x	77mm	9	157	★★★★★	
	Nikon AF-S 120-300mm f/2.8E FL ED SR VR	£10499/\$9500	F	FX	2.5x	Yes	Ultrasonic	3250g	2m	0.16x	112mm	9	156	★★★★★	
SUPER	Nikon AF-S 200-500mm f/5.6E ED VR	£1249/\$1397	F	FX	2.5x	Yes	Ultrasonic	2300g	2.2m	0.22x	95mm	9	157	★★★★★	
	Nikon Z DX 50-250mm f/4.5-6.3 VR	£289/\$377	Z	DX	5x	Yes	Stepping	405g	0.5m	0.23x	62mm	7	148	★★★★★	■
	Nikon Z 70-180mm f/2.8	£1199/\$1247	Z	FX	2.6x	No	Stepping	795g	0.27m	0.48x	67mm	9	156	★★★★★	
	Nikon Z 70-200mm f/2.8 VR S	£2149/\$2600	Z	FX	2.9x	Yes	Stepping	1140g	0.5m	0.2x	77mm	9	156	★★★★★	■ ■
	Nikon Z 100-400mm f/4.5-5.6 VR S	£2199/\$2697	Z	FX	4x	No	Stepping	1355g	0.75m	0.38x	77mm	9	157	★★★★★	■ ■
	Nikon Z 180-600mm f/5.6-6.3 VR	£1799/\$1697	Z	FX	3.3x	Yes	Stepping	1955g	1.3m	0.25x	95mm	9	157	★★★★★	■
	Sigma 50-100mm f/1.8 DC HSM A	£999/\$1100	F	DX	2x	No	Ultrasonic	1490g	0.95m	0.15x	82mm	9	72	★★★★★	
	Sigma 60-600mm f/4.5-6.3 DG OS HSM S	£1699/\$2000	F	FX	10x	Yes	Ultrasonic	2700g	0.6m	0.3x	105mm	9	127	★★★★★	
	Sigma 70-200mm f/2.8 DG OS HSM S	£1099/\$1380	F	FX	2.9x	Yes	Ultrasonic	1805g	0.95m	0.21x	82mm	11	156	★★★★★	■ ■
	Sigma 100-400mm f/5-6.3 DG OS HSM C	£699/\$699	F	FX	4x	Yes	Ultrasonic	1160g	1.6m	0.26x	67mm	9	157	★★★★★	■ ■
WIDE PRIMES	Sigma 120-300mm f/2.8 DG OS HSM S	£2699/\$3600	F	FX	2.5x	Yes	Ultrasonic	3390g	1.5-2.5m	0.12x	105mm	9	156	★★★★★	■ ■
	Sigma 150-600mm f/5-6.3 DG OS HSM C	£849/\$939	F	FX	4x	Yes	Ultrasonic	1930g	2.8m	0.2x	95mm	9	157	★★★★★	■ ■
	Tamron 35-150mm f/2-2.8 Di III VXD	£1799/\$1999	Z	FX	4.3x	No	Stepping	1165g	0.33-0.85m	0.17-0.18x	82mm	9	159	★★★★★	
	Tamron SP 70-200mm f/2.8 Di VC USD G2	£1369/\$1200	F	FX	2.9x	Yes	Ultrasonic	1500g	0.95m	0.16x	77mm	9	156	★★★★★	■ ■
	Tamron 70-300mm f/4.5-6.3 Di III RXD	£599/\$699	Z	FX	4.3x	No	Stepping	580g	0.8-1.5m	0.11-0.2x	67mm	7	148	★★★★★	
	Tamron 100-400mm f/4.5-6.3 Di VC USD	£799/\$799	F	FX	4x	Yes	Ultrasonic	1115g	1.5m	0.28x	67mm	9	157	★★★★★	
	Tamron SP 150-600mm f/5-6.3 Di VC USD G2	£1249/\$1399	F	FX	4x	Yes	Ultrasonic	2010g	2.2m	0.26x	95mm	9	157	★★★★★	
	Nikon AF-S DX 18-140mm f/3.5-5.6G ED VR	£599/\$500	F	DX	7.8x	Yes	Ultrasonic	490g	0.45m	0.23x	67mm	7	27	★★★★★	
	Nikon AF-S DX 18-300mm f/3.5-6.3G ED VR	£629/\$700	F	DX	16.7x	Yes	Ultrasonic	550g	0.48m	0.32x	67mm	7	136	★★★★★	
	Nikon Z DX 18-140mm f/3.5-6.3 VR	£555/\$650	Z	DX	7.7x	Yes	Stepping	315g	0.2m	0.33x	62mm	7	136	★★★★★	

	LENS NAME	Price	Mount	DX/FX	Max zoom	Stabilizer	Autofocus	Weight	Min focus	Magnification	Filter size	Aperture blades	Issue reviewed	Rating	Awards
WIDE PRIMES	Samyang 14mm f/2.8 AF	£559/\$800	F	FX	None	No	None	474g	0.2m	0.15x	None	7	105	★★★★★	
	Samyang 14mm f/2.4 XP	£899/\$730	F	FX	None	No	None	791g	0.28m	0.08x	None	9	142	★★★★★	🏆🏆
	Samyang 14mm f/2.8 IF ED UMC	£349/\$350	F	FX	None	No	None	560g	0.28m	N/S	None	6	70	★★★★★	
	Samyang 20mm f/1.8 ED AS UMC	£499/\$580	F	FX	None	No	None	488g	0.2m	N/S	None	7	116	★★★★★	
	Samyang 24mm f/1.4 ED AS UMC	£559/\$550	F	FX	None	No	None	680g	0.25m	N/S	77mm	8	104	★★★★★	
	Samyang T-S 24mm f/3.5 ED AS UMC (tilt & shift)	£599/\$800	F	FX	None	No	None	680g	0.2m	N/S	82mm	8	25	★★★★★	
	Samyang 35mm f/1.4 AS UMC AE	£499/\$500	F	FX	None	No	None	660g	0.3m	0.2x	77mm	8	125	★★★★★	
	Sigma 14mm f/1.8 DG HSM A	£1399/\$1599	F	FX	None	No	Ultrasonic	1170g	0.27m	0.1x	None	9	149	★★★★★	
	Sigma 15mm f/2.8 EX DG Diagonal Fisheye	£599/\$610	F	FX	None	No	Electric	370g	0.15m	0.26x	None	7	12	★★★★★	
	Sigma 16mm f/1.4 DC CN C	£449/\$499	Z	DX	None	No	Stepping	405g	0.25m	0.1x	67mm	9	154	★★★★★	
	Sigma 20mm f/1.4 DG HSM A	£779/\$900	F	FX	None	No	Ultrasonic	950g	0.28m	0.14x	77mm	9	116	★★★★★	
	Sigma 24mm f/1.4 DG HSM A	£629/\$850	F	FX	None	No	Ultrasonic	665g	0.25m	0.19x	77mm	9	116	★★★★★	🏆🏆🏆
	Sigma 30mm f/1.4 DC HSM A	£449/\$500	F	DX	None	No	Ultrasonic	435g	0.25m	0.15x	62mm	9	111	★★★★★	
	Sigma 30mm f/1.4 DC DN C	£349/\$399	Z	DX	None	No	Stepping	265g	0.3m	0.14x	52mm	9	152	★★★★★	
	Sigma 35mm f/1.4 DG HSM A	£649/\$800	F	FX	None	No	Ultrasonic	665g	0.3m	0.19x	67mm	9	125	★★★★★	
	Tamron SP 35mm f/1.4 Di USD	£829/\$900	F	FX	None	No	Ultrasonic	805g	0.3m	0.3x	72mm	9	111	★★★★★	🏆
	Viltrox AF 13mm f/1.4 Z	£349/\$459	Z	DX	None	No	Stepping	420g	0.22m	0.1x	67mm	9	142	★★★★★	🏆🏆
	Viltrox AF 23mm f/1.4 Z	£230/\$320	Z	DX	None	No	Stepping	300g	0.3m	0.1x	52mm	9	144	★★★★★	🏆
	Viltrox AF 33mm f/1.4 Z	£210/\$279	Z	DX	None	No	Stepping	270g	0.4m	0.1x	52mm	9	152	★★★★★	🏆
	Voigtlander 15mm f/4.5 Super Wide-Heliar Z Aspherical	£849/\$799	Z	FX	None	No	None	290g	0.126m	0.25x	58mm	10	160	★★★★★	
Voigtlander D23mm f/1.2 Nokton Z Aspherical	£649/\$699	Z	DX	None	No	None	240g	0.18m	0.2x	46mm	12	158	★★★★★		
Zeiss Milvus 18mm f/2.8 ZF.2	£2190/\$2300	F	FX	None	No	None	675g	0.25m	0.1x	77mm	9	116	★★★★★		
Zeiss Milvus 35mm f/2 ZF.2	£1160/\$1200	F	FX	None	No	None	650g	0.3m	0.19x	58mm	9	87	★★★★★		
7Artisans 50mm f/1.05	£450/\$349	Z	FX	None	No	None	606g	0.57m	0.13x	58mm	13	152	★★★★★		
Nikon PC-E Micro 45mm f/2.8D ED (tilt & shift)	£1899/\$2050	F	FX	None	No	None	740g	0.25m	0.5x	77mm	9	25	★★★★★		
Nikon AF-S 50mm f/1.8G	£229/\$220	F	FX	None	No	Ultrasonic	185g	0.45m	0.15x	58mm	7	130	★★★★★		
Nikon AF-S 50mm f/1.4G	£459/\$450	F	FX	None	No	Ultrasonic	280g	0.45m	0.15x	58mm	9	130	★★★★★		
Nikon AF-S 58mm f/1.4G	£1699/\$1600	F	FX	None	No	Ultrasonic	385g	0.58m	0.13x	72mm	9	40	★★★★★		
Nikon Z 40mm f/2	£229/\$280	Z	FX	None	No	Stepping	170g	0.29m	0.17x	52mm	9	140	★★★★★	🏆	
Nikon Z 50mm f/1.8 S	£489/\$700	Z	FX	None	No	Ultrasonic	415g	0.4m	0.15x	62mm	9	140	★★★★★	🏆🏆	
Nikon Z 50mm f/1.2 S	£2099/\$2099	Z	FX	None	No	Stepping	1090g	0.45m	0.15x	82mm	9	122	★★★★★		
Nikon Z 58mm f/0.95 S Noct	£8299/\$7999	Z	FX	None	No	Stepping	2000g	0.5m	0.19x	82mm	11	108	★★★★★		
Sigma 50mm f/1.4 DG HSM A	£649/\$950	F	FX	None	No	Ultrasonic	815g	0.4m	0.18x	77mm	9	130	★★★★★		
Sigma 56mm f/1.4 DC DN C	£449/\$499	Z	DX	None	No	Stepping	280g	0.5m	0.14x	55mm	9	152	★★★★★		
Viltrox AF 56mm f/1.4Z	£250/\$299	Z	DX	None	No	Stepping	320g	0.6m	0.1x	52mm	9	152	★★★★★	🏆🏆	
Yongnuo YN50mm f/1.8Z DF DSM	£345/\$359	Z	FX	None	Yes	Stepping	417g	0.45m	0.15x	58mm	9	152	★★★★★	🏆	
Zeiss Milvus 50mm f/1.4 ZF.2	£1245/\$1200	F	FX	None	No	None	875g	0.45m	0.15x	67mm	9	130	★★★★★		
Nikon AF-S 85mm f/1.8G	£489/\$477	F	FX	None	No	Ultrasonic	350g	0.8m	0.12x	67mm	7	160	★★★★★	🏆	
Nikon AF-S 85mm f/1.4G	£1699/\$1447	F	FX	None	No	Ultrasonic	595g	0.85m	0.12x	77mm	9	160	★★★★★		
Nikon AF-S 105mm f/1.4E ED	£2099/\$2097	F	FX	None	No	Ultrasonic	985g	1m	0.13x	82mm	9	160	★★★★★		
Nikon AF-S 300mm f/4E PF ED VR	£1619/\$2000	F	FX	None	Yes	Ultrasonic	755g	1.4m	0.24x	77mm	9	63	★★★★★		
Nikon AF-S 400mm f/2.8E FL ED VR	£12999/\$11200	F	FX	None	Yes	Ultrasonic	3800g	2.6m	0.14x	40.5mm	9	143	★★★★★	🏆	
Nikon AF-S 500mm f/4E FL ED VR	£10999/\$10300	F	FX	None	Yes	Ultrasonic	3090g	3.6m	0.15x	40.5mm	9	143	★★★★★	🏆	
Nikon AF-S 500mm f/5.6E PF ED VR	£3229/\$3600	F	FX	None	Yes	Ultrasonic	1460g	3m	0.18x	95mm	9	143	★★★★★		
Nikon AF-S 600mm f/4E FL ED VR	£12999/\$12300	F	FX	None	Yes	Ultrasonic	3810g	4.4m	0.14x	40.5mm	9	143	★★★★★	🏆	
Nikon Z 85mm f/1.8 S	£699/\$697	Z	FX	None	No	Ultrasonic	470g	0.8m	0.12x	67mm	9	160	★★★★★	🏆	
Nikon Z 85mm f/1.2 S	£2819/\$2797	Z	FX	None	No	Ultrasonic	1160g	0.85m	0.11x	82mm	11	160	★★★★★	🏆	
Nikon Z 135mm f/1.8 S Plena	£2699/\$2497	Z	FX	None	Yes	Stepping	995g	0.82m	0.2x	82mm	11	160	★★★★★	🏆🏆	
Nikon Z 400mm f/2.8 TC VR S	£13499/\$14000	Z	FX	None	Yes	SSVCM	2950g	2.5m	0.17x	Drop-in	9	143	★★★★★	🏆	
Nikon Z 400mm f/4.5 VR S	£2899/\$3250	Z	FX	None	Yes	Stepping	1245g	2.5m	0.16x	95mm	9	143	★★★★★	🏆🏆🏆	
Nikon Z 600mm f/4 TC VR S	£15499/\$15497	Z	FX	None	Yes	Stepping	3260g	4.3m	0.14-2x	Drop-in	9	146	★★★★★		
Nikon Z 600mm f/6.3 VR S	£4799/\$4799	Z	FX	None	Yes	Stepping	1470g	4m	0.15x	95mm	9	159	★★★★★	🏆	
Nikon Z 800mm f/6.3 VR S	£5499/\$6500	Z	FX	None	Yes	Stepping	2385g	5m	0.16x	Drop-in	9	141	★★★★★	🏆🏆	
Samyang AF 85mm f/1.4 F	£550/\$530	F	FX	None	No	None	480g	0.9m	0.11x	77mm	9	140	★★★★★		
Samyang MF 85mm f/1.4 Z	£319/\$399	Z	FX	None	No	None	730g	1.1m	0.09x	72mm	8	152	★★★★★		
Sigma 85mm f/1.4 DG HSM A	£929/\$1199	F	FX	None	No	Ultrasonic	815g	0.85m	0.12x	86mm	9	160	★★★★★	🏆🏆	
Sigma 105mm f/1.4 DG HSM A	£1249/\$1599	F	FX	None	No	Ultrasonic	1645g	1m	0.12x	105mm	9	160	★★★★★		
Sigma 500mm f/4 DG OS HSM S	£4699/\$6000	F	FX	None	Yes	Ultrasonic	3310g	3.5m	0.15x	46mm	9	143	★★★★★	🏆🏆	
Tokina SZX Super Tele 400mm f/8 Reflex MF	£209/\$229	F, Z	FX	None	No	None	355g	1.15m	0.4x	67mm	None	148	★★★★★		
Yongnuo YN85mm f/1.8Z DF DSM	£345/\$379	Z	FX	None	Yes	Stepping	405g	0.8m	0.13x	58mm	7	152	★★★★★	🏆	
Irix 150mm f/2.8 Macro 1:1 Dragonfly	£510/\$495	F	FX	None	No	None	831g	0.35m	1x	77mm	11	150	★★★★★		
Laowa 90mm f/2.8 2:1 Ultra Macro APO	£569/\$499	Z	FX	None	No	None	619g	0.21m	2x	67mm	13	150	★★★★★		
Laowa 100mm f/2.8 2:1 Ultra Macro APO	£569/\$499	F, Z	FX	None	No	None	650g	0.25m	2x	67mm	7, 13	150	★★★★★		
Nikon AF-S DX 40mm f/2.8G Micro	£299/\$280	F	DX	None	No	Ultrasonic	235g	0.16m	1x	52mm	7	110	★★★★★		
Nikon AF-S DX 85mm f/3.5G ED VR Micro	£459/\$557	F	DX	None	Yes	Ultrasonic	355g	0.29m	1x	52mm	9	150	★★★★★		
Nikon Z MC 50mm f/2.8	£539/\$647	Z	FX	None	No	Stepping	260g	0.16m	1x	46mm	9	150	★★★★★		
Nikon Z MC 105mm f/2.8 VR S	£899/\$1047	Z	FX	None	Yes	Stepping	630g	0.29m	1x	62mm	9	150	★★★★★	🏆🏆🏆	
Samyang 100mm f/2.8 ED UMC Macro	£429/\$490	F	FX	None	No	None	715g	0.31m	1x	67mm	9	110	★★★★★		
Tokina atx-i 100mm f/2.8 FF Macro Plus	£424/\$429	F	FX	None	No	Electric	515g	0.3m	1x	55mm	9	150	★★★★★		

Mifsuds Photographic Ltd Est. 1954.

Family Run Pro Dealership With Friendly, Knowledgeable Staff.

27-29, Bolton Street, Brixham, Devon. TQ5 9BZ.

www.mifsuds.com 01803 852400 info@mifsuds.com

Current opening times: - **Tuesday - Saturday 10am till 2pm.**

*Proudly Celebrating 70 Years Of Serving
The Photographic Community*



*As a thank you to the many customers who have supported us during these fabulous years,
we are planning a series of promotions and giveaways throughout 2024,
so be sure to keep checking our website...*

WWW.MIFSUDS.COM for full details.

Remember too that we have the West Country's best selection of used & new stock...

DIGITAL (DSLR / Mirrorless) - FILM (35mm-6x7)

LENSES (AF / MF) - ACCESSORIES Etc.

Or sign up via the website, to receive regular updates on the latest news of what is new and happening at

MIFSUDS PHOTOGRAPHIC.



*This is the camera used
to photograph weddings
back when the business
first opened*

THE BEST STOCKED DEALER IN THE WEST COUNTRY

SAVE 50%

**On Selected Bags, Tripods And Filters
Check Website For Details**

WANTED



YOUR FILM AND DIGITAL KIT

UPGRADE NOW - PART EXCHANGE & COLLECTION AVAILABLE (Subject to postcode)

CALL MATT 0736 828 8126

8am till 8pm daily

Sensor cleaning and Pro equipment hire available

ANY PRICES SHOWN INCLUDE VAT AND U.K. MAINLAND DELIVERY. Correct 19/01/2024. E&OE.

QUALITY USED EQUIPMENT - Checked, Tested and Warrantied. More on website - www.mifsuds.com.

NIKON AF Cameras, Lenses, Flash and Accessories USED

Used Nikon

Z9 body box £3999
 Z8 body box £3199
 Z7 MKII body box £1799
 Z7 body box £1199

Used Nikon

400mm F2.8 E FL AFS VR £4999
 500mm F4 E FL ED VR £3499
 500mm F5.6 E PF AFS VR £2499

Used Nikon

D5 body £2999
 D850 body box £1499
 D500 body box £1299

NIKON Z MIRRORLESS USED

Z9 body box	£3999
Z8 body box	£3199
Z7 MKII body box	£1799
Z7 body box	£1199
Z6 MKII body box	£1199
Z50 body box	£499
14-24 F2.8 S box	£1699
16-50 F3.5/6.3 S VR DX	£249
24-70 F2.8 S box	£1699
24-70 F4 S	£399
35 F1.8 S box	£599
40 F2 box	£199
50 F1.2 S box	£1699
50 F1.8 S	£449
50-250 F4.5/6.3 S DX	£199
70-200 F2.8 VR S box	£1899
85 F1.8 Z box	£599
100-400 F4.5/5.6 VR S box	£1999
105 F2.8 VR macro box	£799
400 F4.5 VR S Mint box	£2699
FTZ adapter II box	£229
FTZ adapter box	£179

NIKON DSLR USED

D5 body	£2999
D4 body box	£899
D850 body Mint box	£1999
D850 body box	£1499
D810 body box	£499/799
D800 body box	£299/599
D780 body Mint box	£1599
D750 body box	£799
D700 body	£249

D500 body box	£1299
D7500 body box	£899
D7200 body box	£649
D7100 body box	£449
D7000 body	£299
D90 or D80 body each	£149
MBD-18 (D850)	£269
MBD-17 (D500)	£199
MBD-16 (D750)	£149
MBD-15 (D7000/7100/7200)	£69
MBD-12 (D800/810)	£149
MBD-80 (D80/90)	£49

NIKON AF LENSES USED

10.5 F2.8 fisheye box	£249
10-20 F4.5/5.6 AF-P DX VR	£239
10-24 F3.5/4.5 AFS box	£399
14-24 F2.8 AFS	£699
16 F2.8 AFD fisheye	£299
16-35 F4 AFS VR box	£399
16-80 F2.8/4 VR DX	£499
16-85 F3.5/5.6 AFS VR	£199
18-35 F3.5/4.5 AFS box	£399
18-35 F3.5/4.5 AFD	£99
18-55 F3.5/5.6 AF VR DX	£99
18-105 F3.5/5.6 VR DX AFS	£149
18-140 F3.5/5.6 AFS VR box	£149
18-200 F3.5/5.6 VR DX MKII	£299
18-300 F3.5/5.6 VR DX	£599
20 F1.8 AFS box	£599
20 F2.8 AFD box	£199
24 F1.4 G AFS Mint box	£699
24 F2.8 AFD box	£279
24-70 F2.8 AFS VR box	£1399

24-70 F2.8 AFS	£499
24-120 F4 AFS VR	£499
28-300 F3.5/5.6 VR box	£599
35 F1.4 AFS G box	£799
35 F1.8 AFS G DX	£99
35 F1.8 AFS ED	£299
35 F2.8 AFD	£329
50 F1.4 AFS G box	£299
50 F1.8 AFS box	£99
50 F1.8 AFD	£99
55-200 F4.5/5.6 AFS VR box	£149
60 F2.8 AFS	£249
60 F2.8 AFD	£249
70-200 F2.8 E FL AFS box	£1399
70-200 F2.8 AFS VR II box	£699
70-300 F4.5/5.6 E AF P VR	£499
70-300 F4.5/5.6 AFS VR box	£299
70-300 F4.5/5.6 AFD	£99
80-400 F4.5/5.6 AFS VR box	£999
85 F1.4 G AFS box	£499
85 F1.8 AFS box	£299
105 F2.8 AFS VR macro	£399
200 F4 AFD macro box	£999
200-500 F5.6 E ED AFS VR box	£999
300 F4 E PF ED VR box	£699
400 F2.8 E FL AFS VR serviced	£4999
500 F4 E FL ED AFS VR serviced	£4499
500 F4 E FL ED AFS VR	£3499
500 F5.6 E PF VR AFS box	£2499
TC14-EIII box	£299
TC14-EII box	£199
TC17-EII box	£99
TC20-EIII box	£199

SIGMA NAF USED

10-20 F3.5 DC box	£199
12-24 F4.5/5.6 II HSM	£399
18-300 F3.5/6.3 OS HSM	£299
24-105 F4 DG OS	£499
35 F1.4 DG Art	£499
50 F1.4 DG HSM Art	£499
70-200 F2.8 EX DG OS HSM	£399
85 F1.4 Art box	£799
105 F2.8 EX DG HSM OS	£299
120-300 F2.8 DG OS HSM Sport	£1699
150 F2.8 EX DG OS HSM box	£499
150-600 F5/6.3 DG OS sport	£749
150-600 F5/6.3 DG OS contem	£749
180 F2.8 DG OS mac box	£599
500 F4 DG OS HSM Sport box	£1999
TC-1401 extender	£169

OTHER NAF USED

TAM 15-30 F2.8 Di USD	£299
TAM 16-300 F3.5/6.3 II VC	£399
TAM 24-70 F2.8 USD VC box	£399
TAM 90 F2.8 macro	£149
TAM 150-600 F5/6.3 Di VC	£499

FLASH / ACCESSORIES USED

SB-700	£149
SB-900	£99
SB-910	£199
SU-800 commander	£199
DR-6 angle finder	£149
DR-5 angle finder	£149
DR-4 angle finder	£79
MC-36A remote	£99
MC-30A remote	£59
SC-19/SC-28 cable each	£49

NIKON 35mm AF/MF Cameras, Lenses, Flash and Accessories USED

Used Nikon

F2A body black £399
 Nikon F Photomic FTn £399
 Apollo chr body

Used Nikon

FM2n body chrome £399
 FM2n body Black £399

Used Nikon

100-300mm F5.6 AIS £199
 35mm F2.8 shift £299

NIKON AF BODIES USED

F5 body	£499
F100 + MB-15 grip	£299
F90X body	£99
F801 body	£99
F801s body	£99

NIKON MF BODIES USED

F Photomic FTn Apollo chrome body	£399
F + plain prism Apollo chrome body	£399
F + plain prism black	£499
F + plain prism chrome	£399

F3HP body	£599
F3 body	£499
F2 Photomic	
+ DP-1 chrome	£399
F2A body black	£399
FM2N body Black	£399
FM2N body Chrome	£399
FE2 body chrome	£349
F301 body	£99
Angle finder F fits FE/FM etc	£49
DG-2 Eyepiece magnifier	£49

NIKON MF LENSES USED

24 F2.8 AIS	£199
28 F2 AIS	£399
28 F2.8 AIS	£299
28 F4 shift	£299
28-85 F3.5/4.5 AIS	£299
35 F2.8 shift	£299
35 F2 AIS	£269
35-70 F3.5 AIS	£99
35-105 F3.5/4.5 AIS	£149
50 F1.4 AIS	£299

50 F1.4 AI	£199
50 F1.8 AIS	£149
55 F2.8 AIS micro	£199
80-200 F4 AIS	£199
100-300 F5.6 AIS	£199
135 F2 AIS	£399
180 F2.8 ED AIS	£349
200 F4 AI	£149
200 F4 AIS	£199
300 F4.5 ED AIS	£399
TC200 converter	£99
PB-4 or PB-6 bellows each	£199

Used Gitzo Carbon Fibre Tripods & Heads

GT3541LS	£499	GH3750QR head	£299
GT3542	£499	GH3780QD head	£299
GT5532S	£499	GH5380SQR head	£299
GT5540LS	£499	GS3750 DQR panoramic head	£149



ITEM YOU REQUIRE NOT LISTED? EMAIL DETAILS OF WHAT YOU ARE LOOKING FOR AND WE WILL EMAIL YOU WHEN WE CAN HELP.

Mail order used items sold on 10 day approval. Return in 'as received' condition for refund if not satisfied (postage not included - mail order only). CORRECT 19/01/2024. E&OE.



Illustration: © Getty

A bit of a bore



Editing isn't for everyone, but spending more time in post doesn't make you any less of a photographer says **Mike Harris**

I've noticed a trend where photographers proudly announce that they either don't edit or hardly edit their photographs. Now, there's nothing wrong with that at all, but when it's said in a manner that belittles image editing, it doesn't half grate on me. Photography is an art and if a photographer edits or doesn't edit their work that's down to a creative decision – there's simply no right or wrong answer.

To edit or not to edit...

Editing photos doesn't make you any less of a photographer and neither does capturing images straight from the camera. Whether or not, and to what extent, you edit is an artistic choice that *you* get to make, and you alone.

So where has this negative view on editing come from? Here's my take. Firstly, editing suites can prove expensive. Historically, industry-standard software cost a pretty penny, but nowadays, the big fish, Adobe, has made things more palatable via its Creative Cloud subscription plans. However, not everybody wants to commit to a subscription but thankfully, other developers, such as Serif, offer extremely capable alternatives at affordable, 'one-and-done' prices.

Secondly, photography can be a daunting

enough hobby in its own right. Add editing into the fray and the challenge can feel insurmountable. But the good news is that editing doesn't have to be difficult. A lot of photographers wrongly assume they need to master Photoshop. And while most never cover the width and breadth of this immense application's capabilities, ask yourself: do you really have to? Plenty of user-friendly editing suites exist, such as Adobe Lightroom, Skylum Luminar Neo or Nikon NX Studio.

Finally, there's a notion that a photograph straight from the camera is somehow more legitimate than a heavily edited one. Sure, specific genres like photojournalism keep editing to a minimum by their very nature, but if you're capturing your take on the world, why can't editing be just another brush in the pot or blob of paint on the palette? And besides, it doesn't matter whether you shoot JPEG or Raw, most images captured in-camera require some tweaking in post to match the colours and tones of the original scene – if that's what you're going for – even if it's just a tiny drop/boost in saturation. In fact, product photographers will often edit images of products, precisely to *correct* colours.

Ultimately, it doesn't matter whether you edit a little, a lot or not at all. It's your choice and don't let anyone tell you otherwise. **M**



Future PLC Quay House, The Ambury, Bath BA1 1UA

Editorial

Editor **Adam Waring**
adam.waring@futurenet.com • 0330 390 6026
 Senior Art Editor **Rebecca Shaw**
 Deputy Editor **Mike Harris**
 Production Editor **Chris McGine**
 Lab Manager **Ben Andrews**

Contributors

Mary Ainge, Adam Atkins, Emma Dunham, Ross Hodinott, Catherine Kirkpatrick, Clive Mason, James Paterson, Matthew Richards, Jamie Smart, Paul David Smith, Paul Wilkinson, Keith Wilson

Cover image

Getty

Photography

Future Photo Studio, Getty. All copyrights and trademarks are recognised and respected

Advertising

Media packs are available on request
 Account Director **Matt Bailey**
matt.bailey@futurenet.com • 0330 390 6272
 Account Director **Chelsea Speakman**
chelsea.speakman@futurenet.com • 0330 390 6065
 Head of Advertising **Matthew Johnston**
matthew.johnston@futurenet.com

International Licensing

N-Photo is available for licensing. Contact the Licensing team to discuss partnership opportunities
 Head of Print Licensing **Rachel Shaw**
licensing@futurenet.com

Subscriptions

Email enquiries help@magazinesdirect.com
 UK orderline & enquiries **0330 333 1113**
 Overseas order line & enquiries **+44(0)330 333 1113**
 Online enquiries www.magazinesdirect.com
 CRM Director **Louise Dudfield**

SUBSCRIPTION DELAYS

Disruption remains within UK and International delivery networks. Please allow up to seven days before contacting us about a late delivery to help@magazinesdirect.com

Circulation

Head of Newstrade **Tim Mathers**

Production

Head of Production **Mark Constance**
 Senior Production Manager **Matthew Eglinton**
 Senior Advertising Production Manager **Joanne Crosby**
 Digital Editions Controller **Jason Hudson**
 Production Manager **Vivienne Calvert**

Management

Senior Vice President **Kevin Addley**
 Managing Director **Stuart Williams**
 Global Head of Design **Rodney Dive**
 Content Director **Chris George**
 Art Director **Dean Usher**

Printed by Buxton Press Limited,
 Palace Rd, Buxton SK17 6AE

Distributed by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU www.marketforce.co.uk
 Email: mfcommunications@futurenet.com

ISSN 2048370



We are committed to only using magazine paper which is derived from responsibly managed, certified forestry and chlorine-free manufacture. The paper in this magazine was sourced and produced from sustainable managed forests, conforming to strict environmental and socioeconomic standards.

All contents © 2024 Future Publishing Limited or published under licence. All rights reserved. No part of this magazine may be used, stored, transmitted or reproduced in any way without the prior written permission of the publisher. Future Publishing Limited (company number 2008885) is registered in England and Wales. Registered office: Quay House, The Ambury, Bath BA1 1UA. All information contained in this publication is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any responsibility for errors or inaccuracies in such information. You are advised to contact manufacturers and retailers directly with regard to the price of products/services referred to in this publication. Apps and websites mentioned in this publication are not under our control. We are not responsible for their contents or any changes or updates to them. This magazine is fully independent and not affiliated in any way with the companies mentioned herein.

If you submit material to us, you warrant that you own the material and/or have the necessary rights/permissions to supply the material and you automatically grant Future and its licensees a licence to publish your submission in whole or in part in any/all issues and/or editions of publications, in any format published worldwide and on associated websites, social media channels and associated products. Any material you submit is sent at your own risk and, although every care is taken, neither Future nor its employees, agents, subcontractors or licensees shall be liable for loss or damage. We assume all unsolicited material is for publication unless otherwise stated, and reserve the right to edit, amend, adapt all submissions.

N-Photo (ISSN 2048-3708) is published monthly with an extra issue in July by Future Publishing, Quay House, The Ambury, Bath, BA1 1UA, UK

The US annual subscription price is \$181.87 Airfreight and mailing in the USA by agent named World Container Inc., c/o BBT 150-15 183rd St, Jamaica, NY 11413, USA

Application to Mail at Periodicals Postage Prices is Pending at Brooklyn NY 11256.

POSTMASTER: Send address changes to N-Photo, World Container Inc., c/o BBT 150-15 183rd St, Jamaica, NY 11413, USA

Subscription records are maintained at Future Publishing, c/o Air Business Subscriptions, Rockwood House, Perrymount Road, Haywards Heath, West Sussex, RH16 3DH, UK



Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR)
www.futureplc.com
 Chief Executive **Jon Steinberg**
 Non-Executive Chairman **Richard Huntingford**
 Chief Financial and Strategy Officer **Penny Ladkin-Brand**
 Tel +44 (0)1225 442 244

READY. ACTION.

NIKON Z 8

This is everything you want in a full-frame hybrid camera. Image quality, precision, flexibility - and a compact, lightweight body. Video to stills. Commissions to passion projects. Don't just create. Thrive.



BODY ONLY
£3,999.00
 + 24-120MM F/4 S
£4,839.00



Learn more about the Nikon Z 8 by watching our hands-on review. Scan here to watch now, or visit www.youtube.com/@parkcameras

EVEN MORE NIKON!

We stock a HUGE RANGE of Nikon cameras, lenses, binoculars and accessories, all at competitive prices. See www.parkcameras.com/nikon to see the range, or call us on 01444 23 70 46.

Nikon Z 7 II
Body Only

£2,949

Nikon Z 6 II
Body Only

£2,069

Nikon Z 24-70mm
f/2.8 S

£2,249

Nikon Z 100-400mm
f/4.5-5.6 VR S

£2,549

PARKCameras



- LONDON**
53-54 Rathbone Place,
LONDON, W1T 1JR
- SUSSEX**
York Road, BURGESS HILL,
West Sussex, RH15 9TT

Visit our website - updated daily
www.parkcameras.com

or call us 7 days a week
01444 23 70 46

All prices include VAT. All products are UK stock. Finance provided by DEKO PAY. See website to learn more. E&OE. Please mention 'N-PHOTO' when ordering items from this advert. Prices correct at time of going to press; Prices subject to change; check website for latest prices.



The Photography & Video Show

16-19 March 2024
The NEC,
Birmingham

Tickets on
sale now!



The destination for anyone
passionate about photography,
video or content creation.

250+ exhibiting brands | 300 live talks & demos | **Endless** inspiration

Get 20% off standard ticket rates with code **NPTTPS24***
Visit **photographyshow.com** to claim

Free entry for professional photographers**

*Discount applies to standard adult entry only and cannot be used in conjunction with any other promotion, including concession rates.
The code expires at midnight on 14 March 2024 and cannot be applied retrospectively.

**Professional photographers, videographers, content creators and image-making industry representatives can apply for FREE entry to the show.
All applications must be made before midnight on 15th March 2024 and will be verified against specific criteria.