



PHOTO MASTERCLASS PART 20

INNOVATIVE WILDLIFE PHOTOGRAPHY



Trying out new methods and techniques allows you to step back from subject-led wildlife images and expand your photographic repertoire. The results created with flash photography, time-lapse and camera traps can be both fascinating and fun.

WITH WILDLIFE PHOTOGRAPHER MARK CARWARDINE

IN THE STRUGGLE to get that perfect shot, it's easy to forget that wildlife photography should be fun. So this month we're deviating a little from the usual subject-by-subject theme in order to experiment. We'll be pushing the boundaries with a range of unusual and innovative techniques and projects that are overlooked or ignored by most photographers. The results may not win competitions or be suitable for print and publishing, but they will certainly get your creative juices flowing and produce some fascinating results.

We'll be talking about time-lapse photography as a relatively simple way of combining a series of still pictures to make moving images; camera-trapping to take pictures of animals remotely while sitting at home

(a technique often used by researchers to monitor remote wilderness areas); shooting panoramics with the help of a computer, by stitching together a series of images to make an extended one; and even taking surreal artistic pictures from inside a moving car. None of these techniques is an exact science, but the results can be amazing – and it's great fun trying something different.

With high-tech equipment relatively cheap these days, high-speed flash is available to almost anyone, but Stephen Dalton explains what was involved over 30 years ago. Meanwhile, Malcolm Schuyl suggests a variety of subjects that can be photographed indoors with little more than a makeshift studio on your kitchen table.

▲ Stephen Dalton's spurge hawkmoth caught in mid-flight was groundbreaking in its day. Stephen developed his own techniques over 30 years ago, at a time when it wasn't thought possible to capture insects in flight. Such striking and atypical images are often the result of home experimentation.



MEET THE EXPERT...

Every issue, our famous photographers share their knowledge and skills.

STEPHEN DALTON

UK

Former director of Oxford Scientific Films and author of 15 books, Stephen Dalton took up photography in 1960 and is best known for his innovative high-speed flash work.



Stephen Dalton's early interest in wildlife developed during school cricket matches. "I was relegated to the far reaches of the outfield," he remembers, "and I passed the time there by studying the insect life."

Insects became a lifelong passion and, in the 1970s, Stephen set out to photograph them in flight. No one had done this before and it took two years to construct the highly specialised equipment. "To capture a midge's wingbeat, I needed a flash of 1/25,000 second and a shutter capable of opening and firing sufficiently quickly," he explains. "It was a real Heath-Robinson affair, with gaffer tape and rubber bands, but it seemed to do the trick." Stephen photographs flying insects in his studio because the equipment requires infrared beams, photo-electric cells, mirrors and a tangle of wires, and each shot takes at least a day to set up. "Plus the flash units are

"The key elements of a high-speed photograph never change."

operated with 5,000 volts," he says, "so I'm reluctant to take them into the field." Stephen loves digital and the new paraphernalia now available that makes high-speed flash photography so much simpler. "But I still use my Heath-Robinson contraption from those early years," he confesses. "And, of course, the key elements of a high-speed photograph never change. Non-obtrusive, natural-looking backgrounds, for example, are crucial – as are the correct foodplants for the species you are photographing."

Stephen is currently working on a book about spiders. "I need challenges," he enthuses, as he continues to push the boundaries, "and I'm enjoying shooting spiders and trying to capture their myriad hunting techniques."

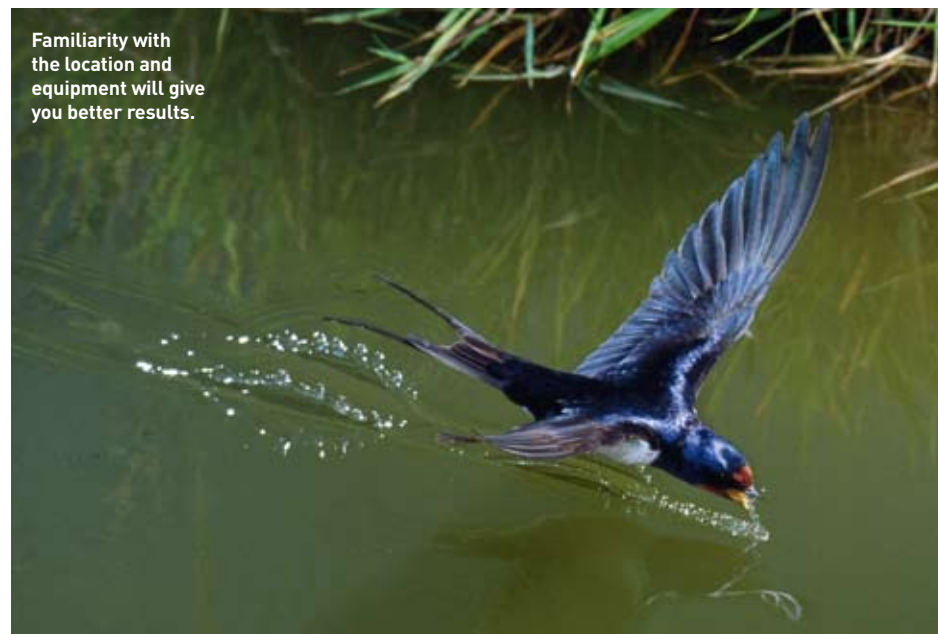
Stephen Dalton's top photography tips



All elements of the image need to be lit to capture sufficient detail.

1 Take your time with lighting

Lighting is the essence of photography and is no less important when shooting animals in a studio. An animal's body needs to look rounded, the skin, scales or hair should show up, the eyes must shine and the background has to be beautifully subtle. Stephen normally works with one or two lights, plus reflectors, and stresses that lighting becomes instinctive after sufficient practice.



Familiarity with the location and equipment will give you better results.

2 Plan ahead

It's important to work out exactly what you want to achieve before you even take your camera out of the cupboard. You must see the finished image in your mind before starting – right down to details such as the angle of the wings and the light on the animal's body. Then begin to plan exactly how you will create the picture using photography techniques.

YOUR STEP-BY-STEP GUIDE...

Mark Carwardine shows you how to apply the theory to get the perfect picture.

1 TIME-LAPSE PHOTOGRAPHY



- » **Set up your camera on a tripod**, expose manually and ensure you have a fully-charged battery to last the shoot.
- » **Choose a scene with continuous movement** – such as clouds moving (as here), flowers blossoming or slugs in a vegetable patch.
- » **Shoot small jpegs and experiment** to find the best interval between shots (the faster the action, the more frames you need to take – for clouds start at one every five seconds). Plan to take about 1,000 images for a 1-minute sequence and use Quick Time Pro (available online) to show the resulting 'film'.

2 CAMERA TRAPS



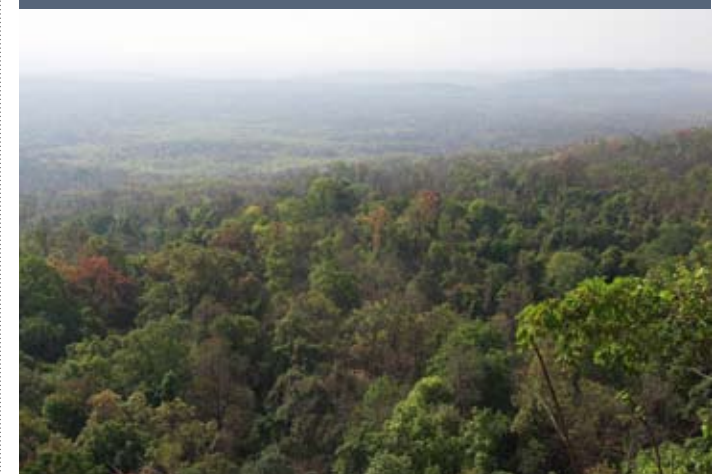
- » **Take pictures while you sleep**. A camera trap is a digital compact camera inside camouflaged housing with an infrared motion detector. Relatively inexpensive packages are available online.
- » **Attach the trap to a tree**, facing anywhere that wildlife is likely to pass nearby. Be careful to keep it out of sight of thieves and vandals.
- » **Check on the trap every day or two** and see which animals have photographed themselves. Some models even make a little warbling sound just before taking the picture, so that the animal subjects look straight into the lens.

3 DRIVE-BY SHOOTING



- » **Take pictures from inside a moving car**. Wind down the window, point your camera towards a colourful scene and shoot. This is a project for passengers only – don't do it while you're driving.
- » **Experiment with different driving speeds** (and shutter speeds) to get varying amounts of blur. Some subjects will look better with little or no detail, others will work only if you can see what is in the image.
- » **Try it without the car** – stand still and swing your camera 180 degrees from one side to the other as you take the picture.

4 PANORAMICS



- » **Pick a scene with sufficient breadth** that would make an interesting panoramic.
- » **Set up your camera on a tripod**, expose manually and ensure that it is sufficiently level to get an even picture as you pan. Take a series of pictures, from left to right, with an overlap of 20-50 per cent (the wider the lens, the more overlap needed).
- » **Use special software** (one of the best, and least expensive, is Arcsoft Panorama Maker 4) to stitch them together on the computer. It's surprisingly easy and, with a little practice, takes just seconds.



ESSENTIAL KIT... PLAMP

Whether you're shooting a time-lapse sequence of blossoming flowers or need extreme precision positioning a reflector for high-speed flash work, you need a plamp. This is a manoeuvrable arm with a clamp at either end. One hangs on to your tripod while the other grasps your subject (or the reflector) and holds it in exactly the right position. It's aimed at macro photographers, because shooting close-ups can be so fiddly, but once you use one you'll wonder how you ever managed without.

tripodhead.com

WHAT TO LOOK FOR:

- » **Easy movement** – the best design is a ball-and-socket segmented arm, which can be positioned quickly and easily.
- » **Variable length** – choose one that allows you to alter its length by adding or removing arm segments (but be careful – if you make the plamp too long it will be less rigid and thus less steady).

CHEAPER ALTERNATIVES:

- » **Clothes pegs, string, sticks and tape** – but they don't work nearly as well.

DOS & DON'TS

- » **DO keep experimenting** (you can't take too many pictures – the real secret of great photography is practice, practice, practice).
- » **DO learn from your mistakes** – you have to make them to get it right in the end.
- » **DON'T be disappointed** if you have a lot of failures – they are inevitable if you are trying something new (just delete the bad shots, if you're shooting digital, and try again).
- » **DON'T just 'spray and pray'** (fire on the motordrive and hope for the best) – it's much better to think out your image before you start shooting.
- » **DON'T use the plamp on wildflowers** without first taking great care not to damage them.

MASTERCLASS CHALLENGE UK...



British photographer **MALCOLM SCHUYL** offers great advice for creating fresh and intriguing images from simple home and garden subjects.

Water on leaves

I noticed this nasturtium leaf in the garden after it had rained. The radial pattern of the veins is interesting in itself, but the water droplet acts like a lens and enhances the effect. Try adding water droplets to leaves with strong patterns or colours, and light from different angles. Look for any unusual or attractive reflections in the water droplet, too.



Feathers

The fine detail on a bird's feather can produce very abstract images. I found this pheasant's feather in my local woods then photographed it using a macro lens and extension tube, illuminated from the side to enhance the detail. Pick a background that complements your subject – in this case a simple piece of black card.



Flowers

Flowers come in a fantastic variety of sizes, textures, structures and colours. Look for eye-catching tones and shapes that work well together, then experiment with depth of field and point of focus. This lily was photographed with a wide aperture, which draws attention to the pattern of the stamens and also throws the petals in the background out of focus.



Moth wings

Cropping in tightly to focus on the eyespots on the wings of this moon moth has produced an image that appears somewhat familiar – in this case, like a face. Look in your garage, shed or around the base of lamp posts for dead butterflies or moths with interesting wing patterns, and play with composition to produce unusual or amusing images.



MASTERCLASS READER PHOTO OF THE MONTH



Now it's your turn. Use all of our experts' hints and tips – and your imagination and creativity – to take a surprising or unusual image of British wildlife. Try Malcolm's ideas or just surprise us! Upload up to eight images on our website and the winning shot will be published in *BBC Wildlife*.

HOW TO ENTER

Log on to www.bbcwildlifemagazine.com and click on Photo Masterclass, then follow the instructions to upload your images. Closing date: Wed 26 September.

RULES 1) The contest is open to amateurs only. 2) Up to eight entries per person. 3) Entry of a picture constitutes a grant to BBC Worldwide to publish it in all media. 4) Entries will be judged by *BBC Wildlife*. 5) The winning image will be published in the November issue. 6) No correspondence will be entered into and winners will not be notified. 7) Entries will not be accepted by post or email. 8) Image file names must include your full name.

'MAMMAL BEHAVIOUR' WINNER: ANDY BROWNE

Andy's shot of a hunting stoat shows behaviour rarely seen, let alone captured on film. Photographing fast action in focus requires great skill. The image also reveals the size disparity between predator and prey.