



PHOTO MASTERCLASS PART 19

EXTREME CLOSE-UP



If you can get really close to your subject, you can enter a new world of wildlife photography. It's a place of great beauty, seldom visited by most other people. But you need to draw on your imagination and all your artistic skills to create a vision from the detail.

WITH WILDLIFE PHOTOGRAPHER MARK CARWARDINE

THIS MONTH we're looking at an alien world, where we can transform the familiar into the unfamiliar, create beauty out of the mundane and reveal details far removed from what most people see in normal daily life. We're delving into the world of macro-photography, shooting subjects most photographers would pass by without a second thought.

Shooting extreme close-ups is a field of photography in which some technological knowledge is unavoidable. It's not as simple as moving in a little nearer and hoping for the best. There are new challenges, such as focusing closely, more awkward lighting and a shallower depth of field.

Then there is the difficulty of finding suitable subjects in the first place. Being a good naturalist helps, but the trick is to stop and search. If you look close enough, it's amazing

how many photogenic shapes, colours and textures you can find within a few metres of where you are standing. Train your eye to discover beauty where others may see only a tangle of grass or a lichen-covered rock. There is a whole new world out there full of visual surprises and tantalising picture possibilities – literally at your feet.

The only limiting factor is your imagination. Technique can never replace artistic vision (you have to shoot as an artist not a technician) and this improves with practice. The more subjects you photograph and the more you experiment, the more you learn about what makes a striking image. And the great advantage is that you can make uncommonly good pictures out of common subjects anywhere – in the house, in the garden or in a wilderness far from home.

▲ This butterfly's wing by Gilles Martin is a perfect subject for close-up photography. From a distance, it appears as a simple splash of colours, but get closer and it transforms into a delicate arrangement of scales, more beautiful than the most exquisite Byzantine mosaics.



MEET THE EXPERT...

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

GILLES MARTIN FRANCE

Wildlife photographer Gilles Martin has been taking shots of animals since the age of seven. He has written a dozen books and his images are published worldwide.



Gilles Martin was drawn to wildlife as a small boy, living along the Loire in Touraine, where his father painted watercolours of the river. His grandfather gave him his first camera when he was just seven years old and he hasn't looked back since.

"I think macro-photography has the edge over other wildlife photography," he says, "because you have more control over all the technical details, such as depth of field and lighting." But it's the aesthetics of a picture that Gilles finds most challenging and satisfying. "I shoot two kinds of image: one showing the subject as a readily identifiable animal and the other far more abstract. I prefer the abstracts," he laughs, "because they force me to be more creative." He loves accentuating details that show beauty without giving away the identity of the animal.

Gilles sometimes works in a studio,

"I prefer the abstracts because they force me to be more creative."

particularly when photographing very small creatures that require extreme magnification, but he prefers to shoot in the field. "I use a mobile studio," he explains, "which I take everywhere." This consists of everything from a camping table to light fibre-optics, complete with their own generator. His favourite subjects are insects. "You need to be a good naturalist to find and work with insects," he says, "and you need excellent reflexes to freeze them in action."

Never short of ideas and grand plans, Gilles is working on a project to photograph as many endangered species as possible, as a kind of photographic Noah's Ark. "My aim is to use photography to raise the alarm before these animals disappear," he says. "The more insects I can squeeze into the ark, the better."

Gilles Martin's top close-up photography tips



A monster rears into your lens when you get down to spider eye-level.

1 Get down to eye-level

The golden rule in most wildlife photography is to take pictures at your subject's eye-level, and this applies equally to macro-photography. Few people see insects and other small creatures from this angle, so it transforms your images from ordinary snapshots from a human perspective into striking pictures with eye-to-eye intimacy and drama.



A relatively uniform and muted background helps project this frog (*Mantella* sp) out of the image.

2 Watch the background

First, pick an interesting subject, then select a simple, attractive and natural-looking background. Many people are so focused on their subject that they forget about the backdrop altogether, but Gilles believes the two are equally important in the final image. Change your angle slightly to make the background more pleasing, or control it with your depth of field.

YOUR STEP-BY-STEP GUIDE...

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

1 EXPERIMENT WITH LIGHTING



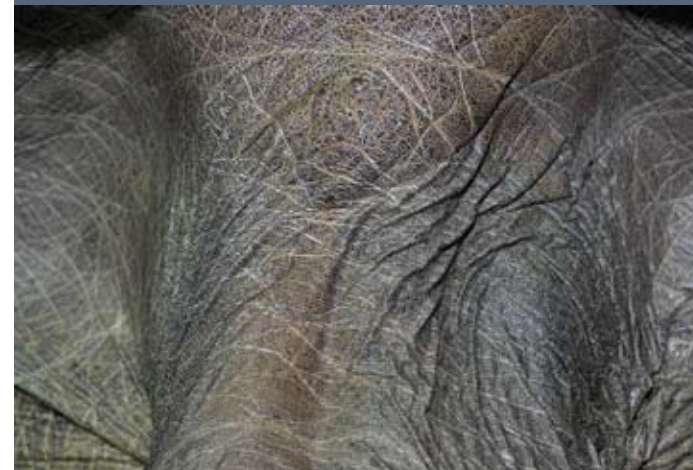
- » **Work with natural light** as much as possible. The best light tends to be at the beginning and end of the day (when conditions are usually calmer, too) or when the weather is overcast.
- » **Buy or make a reflector** to bounce light into the darker areas of your subject. This will fill in the shadows, reduce contrast and create more subtle lighting.
- » **Don't be afraid to use artificial light** – but make it look as natural as possible. Using more than one flashgun helps to balance the light and remove unwanted shadows.

2 WATCH THE FOCUS



- » **Make sure your subject is sharp.** Use your camera's depth-of-field preview button to check that key elements are in focus (eyes are particularly important). Very often, at close range, only a millimetre or two from front to back will be pin sharp.
- » **Shoot from a different angle** if you're struggling to keep key elements in focus. But remember to keep the background out of focus (and therefore simple and clean).
- » **Learn how the depth of field decreases** as magnification increases (and, of course, as the aperture of the lens increases).

3 LOOK FOR TEXTURE AND PATTERN



- » **Look for natural subjects** with eye-catching textures – anything from tree bark to spiders' webs. Then concentrate on their finer details for more abstract and impressionistic views.
- » **Create shadows to emphasise texture** by shooting in stronger, more directional light. Low-angled, bright sunshine or the light from a single flashgun will create strong, well-defined shadows.
- » **Experiment with backlighting.** Leaves, in particular, can look spectacular when backlit (with the light source behind the subject) because this emphasises the intricate pattern of their veins.

4 THINK OUTSIDE THE BOX



- » **Be creative by experimenting.** Once you have mastered the technical challenges of close-up photography, throw caution to the wind and break all the rules. You have to think like an artist in order to achieve something different.
- » **Try throwing everything out of focus** to concentrate on colours and shapes rather than details. Learn to balance colours with the greatest visual impact and use shapes to make pleasing graphics.
- » **Focus on the unexpected,** such as an insect's antennae instead of its eyes, or the edge of a leaf instead of the centre.



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ESSENTIAL KIT... MACRO LENS

There are many ways of taking extreme close-ups using a variety of 'normal' lenses, ranging from wide-angle to telephoto. But macro lenses are designed specifically for the purpose and can produce dramatic results. They are not cheap, but can focus from a few centimetres to infinity and so double as excellent lenses for everyday shooting.

WHAT TO LOOK FOR:

» **Focal length** – the main consideration is working distance: the longer the lens, the further away you will be shooting. This is important if you are photographing wary subjects that will fly, run or crawl away if you move in too close (or if you are shooting venomous snakes and need a safe working distance). Macro lenses typically range from 60mm to 200mm, but one of around 100mm would be a good all-rounder.

CHEAPER ALTERNATIVES:

- » **Close-up filter** – an inexpensive lens that screws onto the front of your normal lens, just like a filter. This is a great way to get started in close-up photography.
- » **Extension tube** – achieve extreme close-ups by putting a hollow metal tube, called an extension tube, between the lens and the camera body. Quite simply, this makes it possible to focus the lens much closer.

DOS & DON'TS

- » **DO use a tripod** whenever possible. Close-up techniques not only magnify the subject but also the blurring effects resulting from camera shake.
- » **DON'T be afraid to use electronic flash** – it is often the best way to light small creatures and helps to solve the problems of camera shake and depth-of-field.
- » **DON'T be tempted to cool invertebrates in the fridge** – a method used by the unscrupulous to make their subjects less active and easier to control.

MASTERCLASS CHALLENGE UK...



Photographer **SIMON BOOTH** shares his top tips for getting closer to our favourite British invertebrates – and sets this month's challenge.

Golden ringed dragonfly

Dragonflies use vantage points to hunt from. Place a stick in the mud at the water's edge and they'll use it to stalk their prey – allowing you to sit and wait with your camera. For extreme close-ups, try looking for dragonflies during a cold snap when they become torpid. They are easy to approach while resting on vegetation at the pond's edge.



Marbled white butterfly

Butterflies also become torpid when it's cool, though they tend to fall from their resting places into deep undergrowth, which can make them tricky to photograph. In these situations, you can gently tease them onto your fingertip and move them to a more suitable location. By doing this you can avoid breezy areas and choose more suitable perches and backgrounds.



Great diving beetle

Many aquatic species make great subjects. All you need is a fishtank and a piece of glass to divide it in two. One half can be used for the subject to swim around in; the other for vegetation. By keeping the two separate, you avoid long periods of frustration waiting for the beetle to appear. Don't forget to release the animal afterwards.



Spider with egg sac

Spiders can be unpredictable and dive for cover at the slightest movement – unless you are a fly. To entice a spider within range, apply the vibration from a tuning fork to part of its web. This fools it into thinking prey has arrived, and it dashes out to catch it. Before realising the false alarm, it may pause, allowing you to grab a few quick pictures.



MASTERCLASS READER PHOTO OF THE MONTH

Now it's your turn. Use all our experts' hints and tips to take great photos of extreme close-ups. Use Simon's ideas for inspiration, though you don't have to photograph the same subjects. 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 1 August.

RULES 1) The contest is open to amateurs only. 2) Up to 8 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 September 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.



'BIRD BEHAVIOUR' WINNER: PAUL SHAW

A group of starlings frozen in flight as they visit a feeder. The balletic movement and apparent weightlessness of the birds makes for a compelling image – not least because we see the graceful side of a species so often derided as a birdtable bully.