



PHOTO MASTERCLASS PART SIX

in association with
TAMRON®

INVERTEBRATE PORTRAITS



Many budding wildlife photographers make the simple error of ignoring 99.9 per cent of potential subjects – our invertebrates. In this month's masterclass, we show that small can be beautiful – and reveal how to capture the animal in its environment as well as take stunning close-ups.

WITH WILDLIFE PHOTOGRAPHER MARK CARWARDINE

EVERYONE SHOULD BE photographing invertebrates. They account for no fewer than 1.20 million of the 1.25 million animal species described around the world, so they offer a phenomenal choice of subjects. Many of them are more approachable than other animals, because they don't look on people as a direct threat, and some will pose for minutes or even hours at a time. Finding them is often no more complicated than squatting down to ground level and looking under a few leaves, stones and fallen trees, or rummaging around the margins of a garden pond. Best of all, they come in a dazzling variety of shapes, sizes and colours.

But photographing them isn't quite as simple as it sounds. There are so many potential subjects – where do

you start? How do you get in close enough to magnify your subjects greater than life-size? Why is it so difficult to get small-scale wildlife in sharp focus? And how do you take pictures that are sufficiently different from textbook portraits to make them jump out from the crowd?

This month, we'll be delving into the world of close-up photography – taking pictures of animals that many wildlife photographers seem to forget or ignore. We'll be finding out why invertebrate photography is as exciting and challenging as any other form of nature photography, learning why it's far more productive to take a few stunning shots of a single subject than many mediocre ones of lots of different subjects, and learning a few invaluable tricks of the trade.

▲ Mayflies emerge on a river in Hungary – one of József L. Szentpéteri's award-winning images of this brief wildlife spectacle. But you don't have to visit Europe to photograph the nuptial flights of mayflies. Many British rivers, including the Wye and Test, provide a stage for the emergence of thousands of mayflies.



MEET THE EXPERT...

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

JÓZSEF L SZENTPÉTERI HUNGARY

József L Szentpéteri is a biologist and award-winning Wildlife Photographer of the Year best known for his work with invertebrates.



“There’s one really big difference between shooting small animals and shooting big ones,” says József L Szentpéteri. “When the pictures are printed in magazines, books and exhibitions, the small ones are enlarged many times while the big ones are reduced. A beetle becomes the same size as an elephant – and that’s what makes invertebrate photography so much fun.”

Photographing invertebrates takes József into a new world often unseen by the naked eye. It can be more surprising – and more intimate – than other forms of wildlife photography. “When sitting in a hide photographing mammals or birds, I often feel disconnected,” he says. “But photographing invertebrates is more personal. You are at one with your subject.”

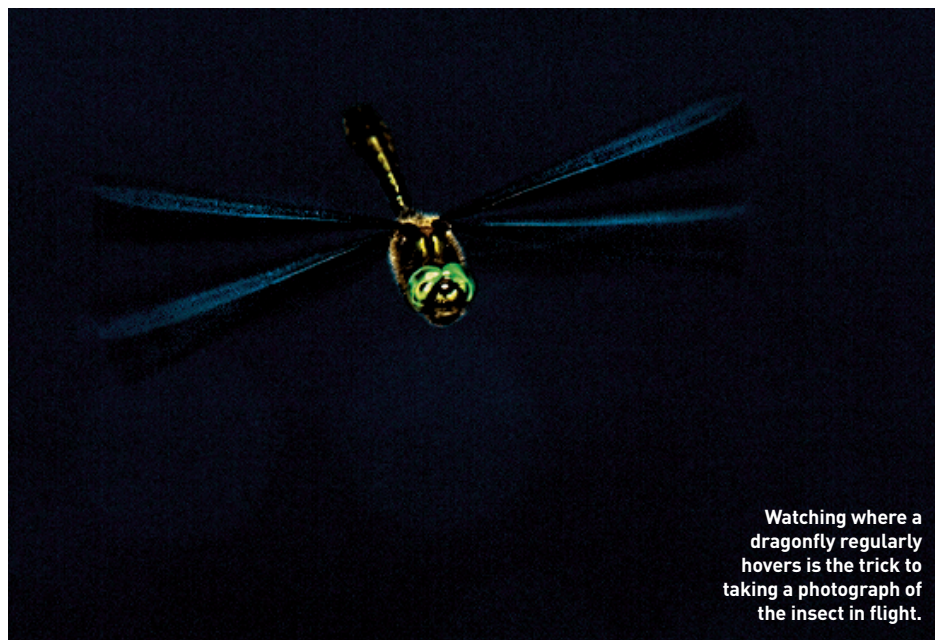
József plans his pictures in advance (“though nature rarely sticks to the plan”).

When I was photographing mayflies, there were just three perfect swarms in a whole year, lasting a total of nine hours.

needed in a very short time.”

So what makes the perfect invertebrate picture? “Extreme close-ups are still very dramatic, but I think there is a new trend towards more environmental images showing the animals in their natural habitats. Gone are the days of homogenous backgrounds,” he says. “But the real challenge has always been to make animals that many people find scary or ugly much more appealing.”

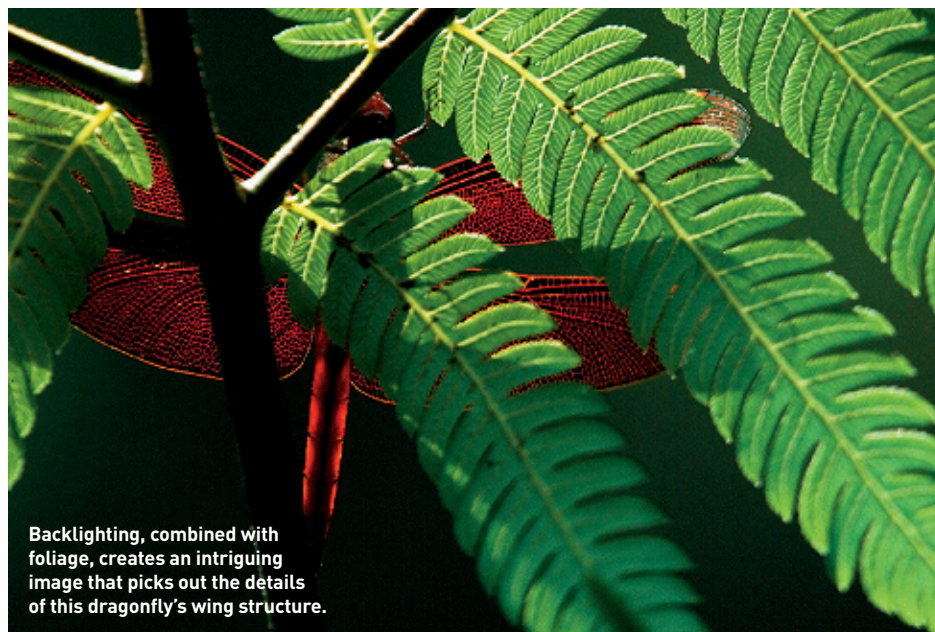
József L Szentpéteri’s top invertebrate photography



Watching where a dragonfly regularly hovers is the trick to taking a photograph of the insect in flight.

1 Read, observe and learn

Don’t just rush in and shoot anything that moves. Take a more considered approach and learn about your subjects before photographing them. When taking pictures of dragonflies, for example, careful observation will show their exact hovering spots (they normally hover in a few preferred places), their favourite perches and their regular flight pathways.



Backlighting, combined with foliage, creates an intriguing image that picks out the details of this dragonfly’s wing structure.

2 Play with the light

Close-up photography of insects and other invertebrates is ideal for combining artificial flash with daylight. Try not to overdo the flash, which can look very harsh, and aim to make the lighting look as natural as possible. Many species have wonderfully transparent wings, so add a little light from behind to show them at their best.

YOUR STEP-BY-STEP GUIDE...

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

1 WORK A THEME



- » **Improve your close-up** photography by limiting your subject matter. Choose a single species – a butterfly, crab or spider, for example – and try to get as many different images as possible. Imagine you have to provide enough pictures to fill a book.
- » **Experiment with different** camera angles, lighting, magnifications and composition. Try shooting with a variety of lenses, from wide-angle to long telephoto, and take everything from traditional portraits to close-ups. Exploring a single theme forces you to think more creatively and helps to develop your close-up techniques.

2 CHOOSE A FRIENDLY SUBJECT



- » **Select your first invertebrate** models very carefully. The best pictures aren’t necessarily of the most challenging subjects. Why start with dragonflies in hovering flight when you can more easily snap them resting on a perch?
- » **Choose a species** that is unlikely to mind a long lens and flashgun a few centimetres from its face. A few hours with a timid butterfly could put you off invertebrate photography altogether, but a self-assured bumblebee, a slithering snail or a blood-sucking mosquito is more likely to make a willing and productive model.

3 PLAY WITH DEPTH OF FIELD



- » **Experiment with depth of field** (how much of the image is in sharp focus). Getting all of the important elements in a picture acceptably sharp is one of the greatest challenges of photographing relatively small invertebrates. Very often, only a millimetre or two from front to back will be pin sharp.
- » **Learn how the depth of field** decreases as magnification increases (and, of course, as the aperture of the lens increases). If your camera has a depth of field preview button, check how much of the image is in focus and compose accordingly.

4 GET REALLY CLOSE



- » **Don’t merely fill the frame** with your subject – fill it with just a tiny portion, such as a spectacular compound eye, a textured cuticle or a multicoloured wing. One of the great pleasures of macrophotography is being able to take pictures of the finer details in nature that most people wouldn’t normally get to see. So experiment by getting in as close as you can.
- » **Look for interesting compositions**, details and colours in the minutiae of invertebrate bodies that aren’t immediately obvious to the naked eye. It’s amazing how hidden details begin to emerge.



PHOTO MASTERCLASS INVERTEBRATE PORTRAITS



ESSENTIAL KIT... MACRO LENS

There are many ways to take natural history close-ups using a variety of lenses, from wide-angle to normal 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 longer the lens (macro lenses typically range from 60mm to 200mm) the greater the working distance. This is an important consideration if you are photographing wary subjects that will fly or run away if you move in too close.

CHEAPER ALTERNATIVES:

- » **Close-up filter** – an inexpensive lens that screws onto the front of your normal lens, just like a filter. 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 only way to light small invertebrates and helps solve problems of camera shake and depth of field.
- » **DON'T cool invertebrates in the fridge** – a method used by some photographers to make their subjects easier to control.

In association with TAMRON®

Tamron AF17-50mm F2.8 XR Di II LD Aspherical. With its fast F2.8 across the range, this lens delivers fast shutter speeds. Lightweight and compact, the 17mm focus offers a wider angle of view than standard zooms. Digital cameras only.



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MASTERCLASS CHALLENGE UK...



High summer is the best time to photograph Britain's invertebrates. **David Chapman** explains how to capture the beauty in the bugs – and sets you a challenge.

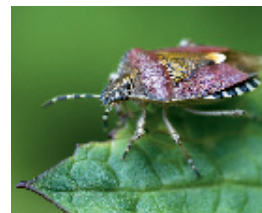
Blue-tailed damselfly

For such a delicate subject, the background of the image should be as plain as possible. Getting up close helps to blur the backdrop, but to achieve the perfect background, wait until you find a subject that is at least a few feet away from the vegetation behind it. Bright weather is desirable and calm conditions essential for damselfly photography.



Hawthorn shieldbug

There are many shieldbug species in Britain. It is tempting to photograph them from behind so that the whole of their distinctive shield can be seen in sharp focus, but as with all animals it is better if you can achieve some eye contact, so experiment with your positioning. Shieldbugs are often slow moving, particularly on cool mornings, so get out early for the best results.



Common blue butterfly

To photograph roosting butterflies, it is vital that you get out with your camera either early (good for dew) or late (better for warm lighting) in the day. Use surrounding vegetation to create a pleasing composition. Face the subject into the frame. A piece of white card can be used to fill any shadows, while subtle backlighting creates a pleasant rim around the insect's wings.



Birch sawfly larvae

There are many species of sawfly in Britain and all their larvae eat leaves. Like caterpillars, they are very small and individually difficult to photograph, but they sometimes create captivating groups, which make wonderful images. Position your camera square to the leaf to ensure that as much of the image as possible is depicted sharply. A tripod is essential.



MASTERCLASS READER PHOTO OF THE MONTH

Now practise your new photography skills on your local British wildlife. Use all of our experts' hints and tips to take pictures of any British damselfly, shieldbug, butterfly or larvae (including caterpillars). Upload them on our website and the winner will be published in *BBC Wildlife* and on our website.

HOW TO ENTER

Log on to www.bbcwildlifemagazine.com and click on Photo Masterclass, then follow the instructions to upload your images. Closing date: Weds 2 August.

RULES 1) The competition is open only to amateur photographers. 2) Up to two entries only per category. 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 Autumn issue. 6) No correspondence will be entered into and winners will not be notified. 7) Entries will not be accepted by post or email.



'DUSK TO DAWN' WINNER: RAYMOND LOFTHOUSE
This masterclass was a challenge, but we chose this image of a seal pup for its beautiful light and composition. Visit our website to see the runners-up.