

# CREATIVE LENS TECHNIQUES

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**Practical**  
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YOUR PICTURES. OUR PASSION

ON YOUR  
**D-SLR**

**HOW TO**

## Shoot images with impact

- ✓ Focal length facts
- ✓ Aperture answers
- ✓ Selective focus effects
- ✓ Simple step-by-step skills

**Get all the tips and advice to  
make your photos stand out**



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**Field guide editor:** Ben Hawkins  
**Field guide art editor:** Chris Rigby  
**Words/photography:** Chris Rutter, Ben Turner, Bob Martin & Andrew James  
**Additional work:** Shane Collins & Rob Holmes

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## Welcome



ONCE YOU BECOME AN SLR user you inevitably start to suffer from lens envy, craving other optics for the different options they offer. This booklet is here to help you get more from whatever lenses you own and perhaps suggest a few you might choose to invest in later on. With the

from Practical Photography editor Andrew James

right lens for the job, an understanding of its capabilities, and some simple camera skills, you can start to photograph anything imaginatively. For my picture above, I simply used an object from my garden – a rusting watering can – and worked out how, with use of selective focusing, to record it so that it has some artistic merit. The lens – an 85mm f/1.8 – does all the work. A wide aperture pushes all the attention onto the

rose, allowing the background of my creosoted garden fence to blur beautifully and act as the perfect dark foil for the can. Even better, the wide aperture correspondingly gives a very fast shutter speed, meaning it's easy to capture a few droplets of water falling from the rose. So now it's your turn... read the advice in this booklet and find out how you can use your lenses to greater creative effect.





CREATIVE LENS TECHNIQUES ON YOUR D-SLR

# Creative essentials

Before we introduce you to the delights of selective focusing and hyperfocal distance (don't worry, they sound worse than they are), let's take a detailed look at the basics. Notebooks at the ready...



# Focal length explained

Your choice of lens will dictate how much of a scene you're able to shoot. Unfortunately this useful information isn't shown on most lenses. Instead, each lens is given a number called the focal length. This number, to those in the know, tells you the all-important field-of-view of the lens. But rather than get too involved in the numbers, what you really need to know is how the different types of lenses can help your creativity. The easiest way of thinking about how focal lengths affect your images is to remember that a lens of around 30mm on a digital SLR with an

APS-C sized sensor gives a similar view to your eyes. On full-frame or 35mm SLRs this focal length equates to around 50mm, often called the 'standard' focal length. A focal length shorter than this, known as a wide-angle lens, gives a wider view and a longer focal length, known as a telephoto, gives a narrower view. You've probably already come across these numbers on the lens that came with your digital SLR, which is likely to have a focal length of around 18-55mm. This means you have the option of shooting the image from a wider to a narrower view than your eyes.

## Wide-angle

(Typical focal length of 10mm to 24mm)

As the name implies, these lenses allow you to include a wide view. This means you can include more of the scene than with longer focal length lenses, but objects will appear smaller in the frame.

## Standard

(Typical focal length of 30mm)

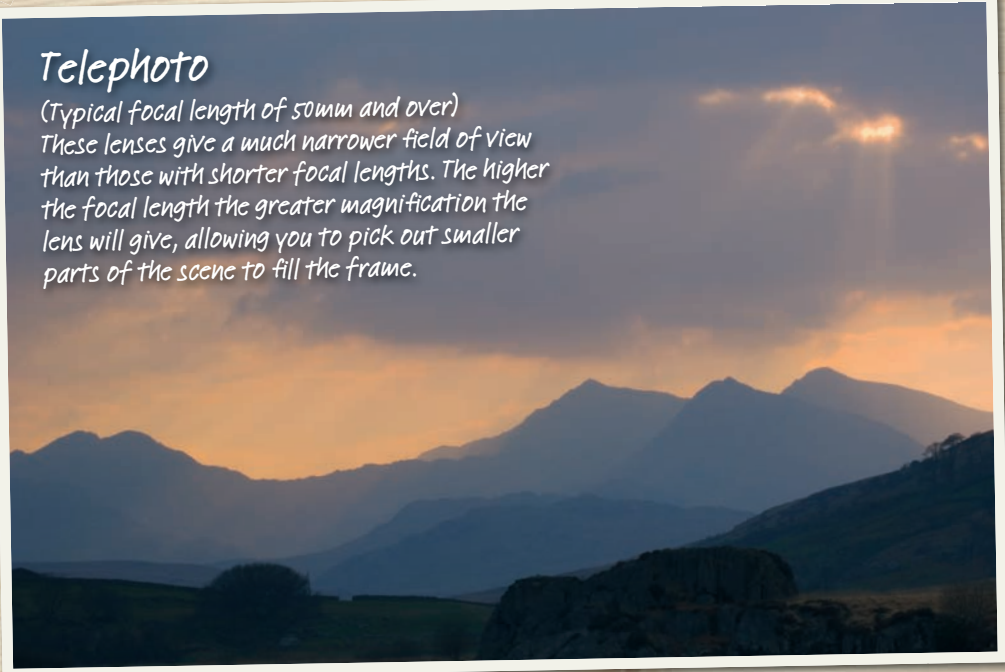
This focal length gives a similar magnification to our eyes, so can give the most 'natural' looking images.



## Telephoto

(Typical focal length of 50mm and over)

These lenses give a much narrower field of view than those with shorter focal lengths. The higher the focal length the greater magnification the lens will give, allowing you to pick out smaller parts of the scene to fill the frame.





# Focal length explained

## Perspective

Lenses allow you to fine-tune the amount of a scene that you shoot without having to move closer or further away from the subject. But your viewpoint (that's where you take the photo from in relation to the subject) also has a huge part to play in how you use your lenses creatively. This is down to perspective, which makes objects at different distances from the camera appear

closer together or further away from each other.

You'll often hear people say that long focal length lenses give a flatter perspective, and wide-angle lenses give greater depth to your pictures. This is rubbish. Lenses play no part in the perspective of your shots – this is purely down to your viewpoint. What the lens allows you to do is frame the shot successfully from a viewpoint

that gives you the perspective that you want. So, viewing objects at a greater distance flattens the perspective of the subject, and a telephoto lens allows you to only include these distant objects. Shoot the same scene with a wider lens and simply crop the image and you'll get the same flattened perspective.

Similarly, get close to the subject and it will appear

further away from objects behind it, and the wider the lens the closer you can get to the subject, as it appears smaller in the frame than with a longer lens.

To show how perspective changes the look of your images we shot this scene from two different positions. We chose lenses so that the gateposts in the foreground remained the same size.



### Wide-angle

Shooting from close to the subject with a wide-angle lens, the building appears to be a long way from the gate in the foreground. Using a wide-angle lens from this viewpoint also allows you to include much more of the surroundings behind the gate than using a longer lens from further away.



### Telephoto

In this shot the building appears to be much closer to the gates than in the shot above. This foreshortening effect is simply down to the more distant viewpoint, and the lens has just allowed us to frame the gates. Because of the viewpoint you can also exclude more of the background than in the closer viewpoint shot with a wide-angle lens.

### CROPPING TIP

As perspective is governed by your viewpoint, if you haven't got a lens long enough to fill the frame you can get the same effect by simply cropping your shot using a wider lens. There will be some loss of quality, but on a 10 megapixel digital SLR you can crop in the equivalent of doubling the focal length and still get an image that will print at almost A4.

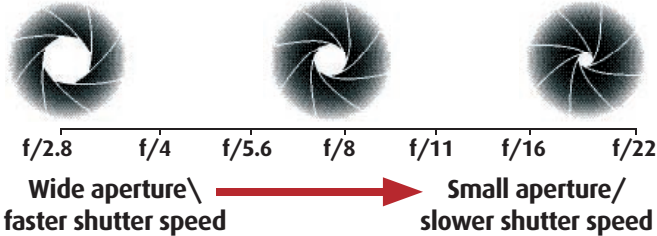


# Aperture explained

**A**lthough the aperture of your lens is primarily there to control the amount of light reaching the sensor, you can also use it more creatively. It plays a large part in controlling the depth-of-field, which we'll look at in more detail later on in this booklet, but your choice of aperture can also have a huge affect on the type of subjects you can shoot and the shutter speed you can use. It's all too easy to simply let the camera automatically select the aperture in Program mode or use a middle f/8 aperture for every shot. As it lets more light reach the

sensor, setting a wide aperture such as f/4 or f/2.8 allows you to shoot in darker conditions than a smaller one, and still use a shutter speed fast enough to handhold your camera without having to use a very high ISO setting. In brighter conditions it also allows you to use faster shutter speeds to help you to freeze movement. The opposite is true of small apertures such as f/11 or f/32. In bright conditions these allow you to use longer shutter speeds for creative effects such as adding blur to moving subjects and for successful panning (turn the page for more).

## APERTURE SETTINGS



### HOW TO SET THE APERTURE

Although aperture is a lens-related setting, on most digital SLRs you change the aperture by using the controls on the camera. Here's how to take control of the aperture settings on your digital SLR...



**1** Set the camera to aperture-priority mode by selecting either A or Av on the exposure mode dial. This mode allows you to set the aperture available on the lens fitted to the camera, while the camera adjusts the shutter speed according to the brightness of the scene.

**2** Using the command dial either on the front or rear of the handgrip, you can now scroll through the available apertures. Watch out for the display indicating conditions where the camera is unable to set the correct exposure because of extremely bright or dark conditions.

## Wide apertures (Typically f/2.8-f/4)

The widest aperture on your lens, indicated by a small 'f' number such as f/2.8 or f/4, allows the maximum amount of light to reach the sensor. This setting allows you to use the fastest shutter speed available in the lighting conditions.

### Lowlight

A wide aperture is excellent for shooting in lowlight conditions when you have to handhold the camera and can't use either flash or a tripod. Here, despite using an aperture of f/2.8, we still had to set the ISO to 640 to achieve a shutter speed fast enough to handhold. Setting a wide aperture normally gives shallow depth-of-field, but using a wide-angle lens and keeping some distance from the subject minimises this problem.



### Action

Setting a wide aperture also helps you to get shutter speeds fast enough to freeze subject movement. This is especially useful for sports, wildlife and action photography when you need these fast shutter speeds in a wide range of lighting conditions. Using an aperture of f/4 allowed us to use a 1/500sec shutter speed to capture this fast-moving bird in flight.





# Aperture explained

## Small apertures (Typically f/11-f/32)

Setting a small aperture lets less light pass through the lens, allowing you to shoot in bright conditions or use long shutter speeds for creative effects.

### ➤ Panning

To give your action shots a sense of speed and excitement you need to use a slow shutter speed and follow the movement with your camera. In bright conditions you'll need to set a very small aperture to allow you to get these shutter speeds, so experiment with different settings to get the desired effect. In this shot, setting f/16 on the camera gave a 1/125sec shutter speed that is perfect for shooting fast-moving subjects such as motor racing.



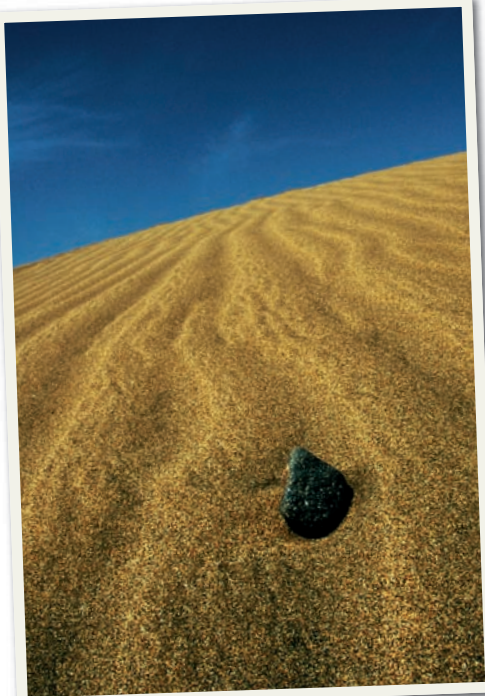
### ➤ Bright conditions

During the brightest parts of the day the light levels can be so high that you need to use a small aperture to simply shoot any pictures at all. This is a rare occurrence in this country, although you'll find it's more of a problem if you take a holiday in a warmer and sunnier part of the world. To capture this sand dune we needed to use an aperture of f/16 to prevent overexposure.

### ➤ Slow shutter speed effects

Blurring the movement of subjects such as water, grasses or people can add extra atmosphere to your landscape and urban shots. To achieve the very slow shutter speeds often required you'll need to set the smallest aperture in most lighting conditions. Remember that you'll need to fix the camera to a tripod to keep the rest of the scene sharp, and by using a small aperture most of the scene will be sharp due to the very wide depth-of-field.

Shooting early in the day allowed us to get a 1-second shutter speed by setting the aperture to f/22 on this shot. This allowed the movement of the reeds blowing in the breeze to be blurred. In brighter conditions you may need to set a smaller aperture, or use a polariser or neutral density filter to cut down the amount of light even more.





# Depth-of-field explained

**M**astering depth-of-field is one of the key techniques that will help your photography. We'll look in more detail at the more creative uses such as selective focusing and keeping every area in focus in the next section, but first you need to know how your lenses and techniques can affect this critical aspect of your images. Depth-of-field is simply the amount of the scene that appears to be sharp in your shot. Unlike our eyesight, which compensates for limited depth-of-field by quickly scanning different

areas of the scene, your lens obeys some simple laws as to how much is going to be in focus. This area extends in front of and behind the point that you've focused on, but it's not distributed evenly. It extends twice as far behind the focus point as it does in front of it. The amount of depth-of-field in your shot is determined by three factors – the focal length of the lens, the aperture used and the distance from the subject. Let's take a look at each of these to see how they affect your images...

## Focal length

The shorter the focal length of the lens the greater the depth-of-field, and the longer the focal length the smaller it will be. So, in general, using wide-angle lenses you'll find that most of the scene is in focus, while telephoto lenses are better for giving shallow depth-of-field.

## Aperture

The wider the aperture you use the less depth-of-field you'll get. So using a small aperture such as  $f/16$  or  $f/22$  will keep as much of the scene in focus as possible, while using an aperture of  $f/4$  or  $f/2.8$  will mean that much less of the scene will be in focus.

## Distance

The closer you are to the subject the less depth-of-field you'll get. You'll find it easier to get greater depth-of-field if you focus on subjects further away from the camera, and if you want shallow depth-of-field, move closer. This is most apparent when shooting close-ups, where you'll get very shallow depth-of-field.

*In the field you need to use all three of these factors to get the right depth-of-field.*



**Let's take a look at how using a wide-angle, telephoto or macro lens will affect your shot.**

## Wide-angle lenses



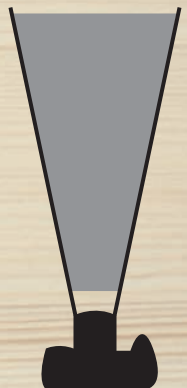
### **$f/2.8$ Shallow depth-of-field**

Because short focal length lenses tend to give wide depth-of-field you need to focus the camera on the closest area of the scene and use the widest aperture available on your lens to get limited depth-of-field. In this shot taken with an 18mm lens, an aperture of  $f/2.8$  and focusing on the flowers closest to the lens allowed us to throw the background out of focus.



### **$f/22$ Large depth-of-field**

Setting almost any aperture below  $f/11$  on a wide-angle lens will keep most of the scene in focus. In this shot we used  $f/22$  on an 18mm lens and focused on the tree in the background, and almost the whole scene, from the closest flowers only a foot or so from the camera to the distant woods, is sharp.





# Depth-of-field explained

## Telephoto lenses



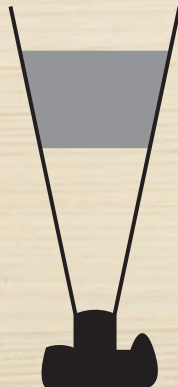
### f/5.6 Shallow depth-of-field

It's relatively easy to get shallow depth-of-field with telephoto lenses. Setting the maximum aperture of most lenses will mean that only a few inches of the subject will be sharp. The depth-of-field can still be limited at apertures such as f/8 or f/11 so you need to focus very carefully to ensure the subject is sharp.



### f/32 Large depth-of-field

To get maximum depth-of-field with telephoto lenses you need to keep plenty of distance between you and your subject. Setting a small aperture such as f/22 or f/32 will also help increase the depth-of-field, but watch out for the long shutter speeds necessary at these apertures causing camera shake.



## Macro lenses



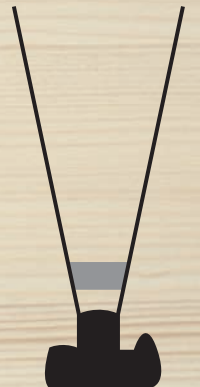
### f/4 Shallow depth-of-field

Because you are so close to the subject, shooting macro and close-ups means that you'll get very little depth-of-field in most shots. Using wide apertures, such as f/2.8 or f/4 there will usually only be a few millimetres of the subject in focus, so accurate focusing is critical. This effect can help you to isolate subjects by blurring the background for added impact in your macro shots.



### f/22 Large depth-of-field

Large depth-of-field means a few inches or centimetres at most when shooting macro subjects. Most macro lenses offer very small minimum apertures of f/22 or f/32 to give the maximum depth-of-field, but you will still often struggle to keep the whole scene in focus. Using these apertures means that subject movement and camera shake can also be a problem.





CREATIVE LENS TECHNIQUES ON YOUR D-SLR

# Creative techniques

Ever wondered how to best use extreme focal lengths for impact? Or isolate the subject by blurring the background?





### Get to grips with... *Selective focusing*

Getting shots with a crisp, detailed foreground and a beautifully blurred background is no mean feat but it's a technique that can transform any scene and give it a fantastic artistic style. This is what selective focusing is all about. It is the act of taking control of the depth-of-field so only the parts of your scene that you want to be sharp are sharp – everything else should be out-of-focus and nicely blurred. However, there's a lot more to it than using a wide maximum aperture. Aperture is just part of the story and will seldom create the effect you want on its own. Here we're going to look at how you can use a combination of techniques to improve a classic garden shot of a flower. We receive hundreds of flower shots every year that fail to make the grade simply because of messy and distracting backgrounds, so we're going to show you five simple ways to turn your snapshots into classy and considered flower studies.



*Don't shoot flower shots like the one above. Instead use selective focusing techniques to blur the background for more impact. Turn the page to find out more...*





## Get to grips with...

# Selective focusing

### Don't shoot like this!

There's very little that's right with this camera technique but we know that a lot of photographers still do it. Probably the biggest crime here is that the picture was taken just below eye-level, a poor choice as it is unlikely to offer the best angle on the subject and the background. All you'll get from this viewpoint is a blanket of bare mud beneath the flower. Our photographer was also a long way from the subject so it will be small in the frame and lack impact. From this distance the background is in focus too, which detracts from the flower. Whatever you do, avoid taking shots like this.



### 2 Get close

Remember, the closer you focus the shallower the depth-of-field will be, which is just what we're after. So you need to get as close to your subject as you realistically can and aim to fill the frame for maximum impact. Don't rely on autofocus when you're this close though – always use manual focusing for more consistent results. If you're using the long end of a zoom lens, try selecting the closest focusing position first and then move backwards or forwards until your subject is in sharp focus.

### 3 Select a wide aperture

Using the mode selector, choose aperture-priority mode so you have full control over the aperture used. Now select the widest aperture available – that's the one with the smallest 'f' number. This is likely to be somewhere between f/2.8 and f/5.6.

### TRY THIS...

The same techniques can be used with landscape shots, and the results can be stunning. Try focusing on a small detail in the foreground and allowing the scene in the distance to blur away into simple yet recognisable shapes.



## Shoot like this!

### 1 Pick the right lens

Exactly which lens you use depends on what's in your kit bag – you need to use the best tool for the job. The ideal lens should offer a long focal length (over 50mm), an aperture of f/4 or wider, and an exceptional close focus ability. The best lens to use in this scenario is a 100mm macro lens, but you don't need a lens that has everything to get great shots. The next best option is a telephoto lens, such as a basic 70-300mm zoom, so long as it can focus on relatively close objects. With this lens you should use the long end of the zoom for the shallowest depth-of-field – this will probably mean that you need to take a few steps backwards too. If you only have a standard zoom lens, then just make sure that you're zoomed all the way in before shooting.

### 4 Use a tripod

With such a shallow depth-of-field any slight movement can put your main focal point outside the area of sharp focus. For this type of image it's essential that our subject is pin-sharp. If you use a tripod your chances of getting the shot are massively increased.

### 5 Check the background

If the background still isn't blurry enough, try to change your position so the background is further away from your subject. One easy way to do this is to drop down so you're not looking directly onto your subject but are looking across it at an angle like this. From this lower angle the background is much further away from the camera and therefore even more out of focus.





# Get to grips with... Hyperfocal distance

When shooting landscapes in particular, there are times when you want the whole scene, from the closest foreground to the far distance, to be sharp. The great news for most digital SLR users is that because most cameras use shorter focal length lenses than 35mm (or full-frame digital SLRs) for the same angle-of-view you'll get greater depth-of-field. This means that you can get more of the scene in focus at the same aperture, but there can still be times when you might struggle to keep the whole scene sharp, particularly when the foreground is very close to the camera or you are shooting low to the ground. In addition to setting a small aperture, you

can also increase the depth-of-field in your shots by using a technique known as hyperfocal focusing. Despite the scary name, it's simply a way of maximising the depth-of-field by focusing part of the way into the scene rather than simply on the far distance (infinity) or the closest object. If you've heard about this technique before you may have been scared off by the masses of detail and calculations involved. While this is true when using larger format cameras, using this technique with the wide-angle lenses you'll use for most landscapes doesn't have to be too precise, as the larger depth-of-field makes the whole process less critical, but no less effective.



### HYPERFOCAL FOCUSING

To make it a little easier for you here's a table of the hyperfocal distances at different focal lengths and apertures. If you focus your lens at the hyperfocal distance with the lens set to this focal length and aperture, everything from the closest focus distance to infinity (the far distance) will be sharp.

#### FOCAL LENGTH – 24MM

Aperture	Hyperfocal distance (metres)	Closest focus distance (metres)
f/8	3.3	1.9
f/11	2.5	1.5
f/16	1.8	1.25
f/22	1.3	1

#### FOCAL LENGTH – 18MM

Aperture	Hyperfocal distance (metres)	Closest focus distance (metres)
f/8	2	1.35
f/11	1.45	1.06
f/16	1	0.8
f/22	0.73	0.6

#### FOCAL LENGTH – 12MM

Aperture	Hyperfocal distance (metres)	Closest focus distance (metres)
f/8	0.9	0.75
f/11	0.65	0.55
f/16	0.45	0.4
f/22	0.33	0.3



Even when setting the smallest aperture, it's often difficult to ensure the whole scene is sharp. The foreground in particular can end up blurred.





## Get to grips with...

## Hyperfocal distance

## How to get maximum depth-of-field

To make the most of the hyperfocal distance you need to use some basic techniques in the field to accurately measure how much depth-of-field you'll need. It's easier if your lens has a focusing distance scale on it, but the standard zooms supplied with many cheaper digital SLRs don't have this. But you can still use the principle of this technique. You'll just need to make a few educated guesses when you focus the lens.

## Step 1

Once you've settled on your composition, focal length and viewpoint you need to decide on the closest object that you want to be sharp. With the lens set to manual focus, carefully focus on this object and read off the measurement from the distance scale on your lens. You may find it easier to temporarily reframe so that the object is in the middle of the image, but make sure that you stay the same distance from the subject when you do this.



*You need to work out the closest subject you want to be in focus. If your lens has a distance scale you can focus on the foreground and read off the distance.*

## Step 2

You now need to set an aperture that will ensure there's enough depth-of-field to keep both the closest subject and the far distance sharp. For an exact aperture value you need to refer to depth-of-field tables, but as a rough guide refer to the tables on the previous page for some of the most common focal lengths you'll use for landscapes on a digital SLR. Set this aperture on the camera, and return the camera to the position you want to take your final shot.

## Step 3

Refocus the lens on the hyperfocal distance using the focus scale of the lens as a reference. If your lens doesn't have a focus scale you'll need to make an educated assessment about these distances. Although not the ideal solution, with a little practise you can get good results using this technique, and as a final check you can use the depth-of-field preview to make sure everything is going to be in focus. You're now ready to shoot.



*Using this technique allows you to get the maximum depth-of-field in the final shot. Using f/16 and focusing on the rocks just beyond the puddle ensured the whole of this scene is sharp.*



## Get to grips with...

## Extreme focal lengths

Changing the lens can completely alter the look and feel of your images. We're going to show you how to pick the right lens to create the style you're after. It's a common misconception that telephoto lenses are just used for taking photos of distant objects, and wide-angle lenses to get more of a scene in shot. As a creative snapper, you should also bear in mind that telephoto and wide-angle lenses allow you to capture a subject at different viewpoints to change the style of your shots. This should be your main reason for choosing one lens over another. Here we've photographed the same tree, at the same time of day, from virtually the same angle, changing only the lens and distance from our subject. It's amazing how much difference this can make – you can hardly tell it's the same tree. Turn the page to find out how you can do the same with your camera and lenses...

## Telephoto shot

By taking a 2-minute stroll from our subject and looking back at it with a 200mm lens we can create the impression that we're in a nicely wooded park.



Our subject

Telephoto viewpoint

Wide-angle viewpoint

## Wide-angle shot

By standing just a couple of metres from the base of the same tree with a 12mm lens, we can reveal the tree's true environment. The rolling storm clouds are really dramatic too.





## Extreme focal lengths...

### Which lens should I use?

#### Choose telephoto if...

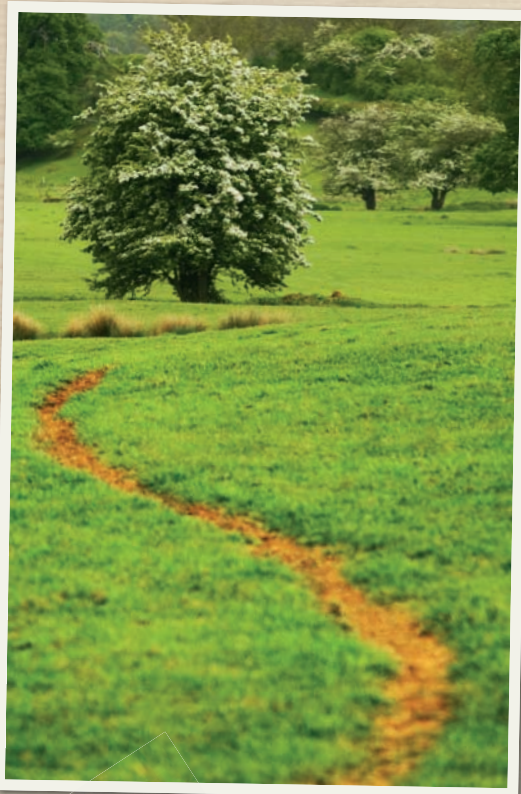
You want to isolate a single subject in a wider scene or you want objects to appear closer together.

#### Why is it so special?

Using a telephoto lens allows you to flatten the apparent depth in your images so everything looks closer together. All you have to do is choose a viewpoint that's a long way from your subject. The trees in the background of our shot are on the other side of a huge grassy field but it looks like a well-wooded area from this distant viewpoint.

#### Composition tricks

Composing with a telephoto lens can be difficult to visualise, particularly as you may have to start out by walking away from your subject to get all of it in shot. However, when you are far enough away, the simple trick is to look through the lens and change your position to isolate just a few graphic elements in the scene in front of you. Nine times out of ten you'll have much more success if you keep the shot clean, simple and clear. By moving just a few metres to either side you can bring completely different objects into your shot, and your job is to isolate the best combination of objects – here we used the gentle curve of a path and well-formed trees in the background to add interest and continuity to the shot.



#### Problem shot

This shot has too many objects in it so looks cluttered and messy. Few of the trees here have nice graphic shapes like our main tree either and it doesn't make for an interesting shot.

#### Choose wide-angle if...

You want to show your subject in its environment to give it context or make the most of a dramatic sky.

#### Why is it so special?

Wide-angle lenses allow you to fit more of a scene into your shot, so you can easily show off a location. This wider view also allows you to use a closer viewpoint to your subject. Doing this makes the objects in your shots appear much further apart than they really are.

#### Composition tricks

When composing with wide-angle lenses you run the risk of having all interest in the scene running across your image in a thin strip at the horizon. This can look incredibly dull – just imagine how bad this shot would look without the big tree in the foreground. To get good foreground like this, all you have to do is go right up close to an object so it's big in the frame. We were positioned literally a couple of meters away from the tree and as a result it gives depth and height to the shot. To compose the other elements in your scene, try to ignore the subtle details to start with and focus your attention on the most eye-grabbing and interesting elements, such as the church and tree here. Now move your feet to find an angle that gives a good spread of interest across the frame – you'll rarely want all the good bits bunched up at one end.



#### Problem shot

If you don't include any close objects in your shot the area of interest will sit as a thin strip at the horizon – the results will be empty and boring. Get as close as you can to your foreground subjects to avoid this.

#### PLAYING WITH PERSPECTIVE

Here's another example of a subject shot with wide and telephoto lenses. Here you can really see how you can alter the apparent depth of the scene by changing the lens and your viewpoint. This can be used to create entirely different images.



#### Wide-angle

With a wide lens we can get right up close to our subjects and still get them in the frame. This gives the effect that the trees are spaced further apart and that the row disappears off to a point in the distance. There's a fantastic feeling of space and depth to this shot.



#### Telephoto

Stepping back and taking a shot with a telephoto lens, the same trees look like they are bunched closely together. It's also clear that there is a thick hedge at the back of the row of trees and they don't just fade into the distance. Everything looks crammed in tightly together.



# 60-second lens techniques

**H**ere are three quick and simple techniques that you can try with your lenses for more creative images. Give them a go and see if you can inject some extra sparkle and dynamism into your photography...

## Star burst

### What is it?

Make bright points of light in your images twinkle with star-like bursts of light. Believe it or not, you don't need any special filters to create this great effect and it works especially well with the sun or streetlamps in low light conditions.

### How do I do it?

Start by selecting aperture-priority mode on your camera using the mode selector, and then choose a really small aperture such as f/22 (the smaller the aperture the more exaggerated the star effect will become). Now take some pictures containing at least one bright light. Don't forget to use a tripod because camera shake can be a problem when using such a small aperture.



## Zoom burst

### What is it?

You don't need Photoshop to make an image like this, just a zoom lens. All you have to do is zoom in while the picture is being taken. Zoom bursts can add an interesting abstract quality to flowers and other colourful objects, and can also add an exaggerated sense of movement to action and sports shots.

### How do I do it?

First, secure your camera on a tripod – this isn't absolutely necessary but makes everything much easier. Now select aperture-priority mode and choose a small aperture between f/11 and f/22 and double-check that your ISO value is set to 100 or less. We need a slow shutter speed of around 1/2sec for this effect, so point your camera at the scene and adjust the aperture until the camera lightmeter displays a suitable shutter speed. Now take a shot while simultaneously zooming in a fast, fluid movement – a standard kit zoom lens is fine for the job. Advanced users may also want to try using flash as well to help capture more sharp detail with action shots.

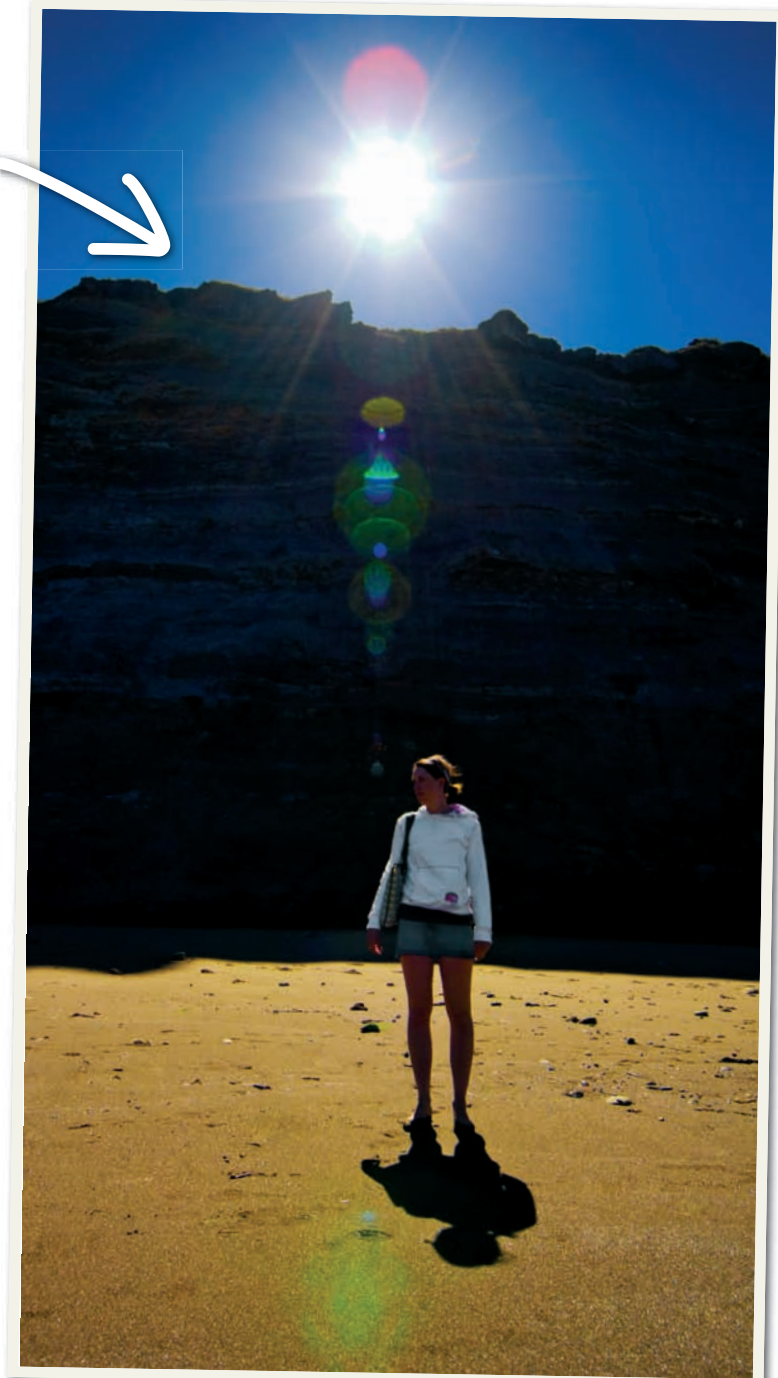
## Lens flare

### What is it?

Lens flare is a common problem that normally occurs when a very bright source of light is within the shot or just outside it. Normally it's an undesirable side effect, but it can be used creatively too to make an image appear much brighter and hotter.

### How do I do it?

To get flare simply include a bright light source in your shot. Zoom lenses tend to be more prone to lens flare than prime lenses, so choose a zoom if you can. You'll need to position the light source towards the edge of the frame to get a good beam of 'ghosts' as we have here. If your pictures are coming out too dark, use exposure compensation and add a stop or two to the exposure – this will make the flare more prominent too. You can also use the depth-of-field preview button on your camera to gauge how the flare will look at the selected aperture.







CREATIVE LENS TECHNIQUES ON YOUR D-SLR

# Creative options

From wallet-friendly gadgets such as teleconverters to wacky gizmos such as Lensbabies and fisheye lenses, there are even more creative options than you'd think...



# Lens accessories

While you can get stuck in and be creative with your standard lenses, there are times when you need something extra. In this section we've put together four of the best lens accessories that will help you out. Two are adapters for lenses, while the other two are, technically, lenses in themselves. Find out if any of these are for you...

## Teleconverters

Long telephoto lenses are expensive, weighty and hard to carry on location and many pros opt for teleconverters as an alternative. These are small accessories that fit between the camera and lens and increase the focal length of the lens by either 1.4x or 2x, depending on the model. The downside is that they decrease the maximum aperture of the lens too. If you use a 70-200mm f/2.8 together with a 1.4x teleconverter it becomes

a 98-280mm f/4, or a 140-400mm f/5.6 if you instead use a 2x teleconverter. If you're using a D-SLR, however, you'll also have to take into consideration your sensor's focal length magnification, so you'll effectively end up with a super telephoto lens! The trouble is that most teleconverters are designed for a specific range of lenses, so make sure they're compatible with your optics before you buy them.

200MM



400MM

Just by adding a teleconverter to your kit you can easily get around the age-old problem of not having a long enough lens.



## TELECONVERTER MATHS...



Don't forget the 1.5x sensor magnification takes us to... 210-600mm f/5.6



AND OFF YOU GO...

## PROS AND CONS

- ✓ Cheap way to get longer telephoto shots with your existing lenses.
- ✓ Small and lightweight for carrying in the field.
- ✗ Only designed to work with certain lenses – usually the expensive ones.
- ✗ Can decrease the overall quality of your images.

## CANON EXTENDERS

Canon users beware! Unlike all other manufacturers, Canon calls its teleconverters 'extenders'. This can cause confusion with extension tubes (see over page) if you're not careful. Don't say we didn't warn you.



# Lens accessories

## Extension tubes

You may think that you have to have a dedicated macro lens to shoot close-up photography. Well, you don't. Any lens you have can be used for amazing macro shots with a little help from an extension tube. This little ring attaches to the rear of your lens and connects to your camera's lens mount. By moving your lens further away from your camera's focal plane, it dramatically increases the close focusing of your lens, allowing you to get within centimetres of your subject for sharp macro images. Using an extension tube will usually mean that you'll need to focus manually but if you're shooting macro, you probably will be anyway. All you need to do is buy the correct one for your lens mount, so always double-check that your lenses are compatible.

### HOW IT WORKS...



### PROS AND CONS

- ✓ Allows you to convert any lens into a macro lens.
- ✗ You may need to go fully manual depending on your model.
- ✓ You can often get shots that a macro lens couldn't.
- ✗ Can reduce image quality.

### WITH EXTENSION TUBE

The extension tube makes any lens capable of producing great close-up shots that wouldn't be possible without a macro lens.

### STANDARD LENS





# Lens accessories

## Lensbaby

One of the more recent additions to the creative lens accessory range is the Lensbaby. It's basically a lens on the end of a bellows which attaches to the camera body just as a normal lens does. You can move the lens around and create a focus 'sweet spot' on one part of the image while the rest is blurred. It is quite popular with some wedding photographers because it can give a slight dreamy effect to a photograph. The Lensbaby can really make your shots stand out but it requires a degree of experimentation and perseverance. There are three types available – the Original, the Lensbaby 2.0, which is sharper and goes down to f/2, and the Lensbaby 3G, which has a clamp for more precise results.



### LENSBABY ORIGINAL

Lens mounts available – Canon, FourThirds, Nikon, Pentax, Sony **£70**

### LENSBABY 2.0

Lens mounts available – Canon, FourThirds, Nikon, Pentax, Sony **£110**

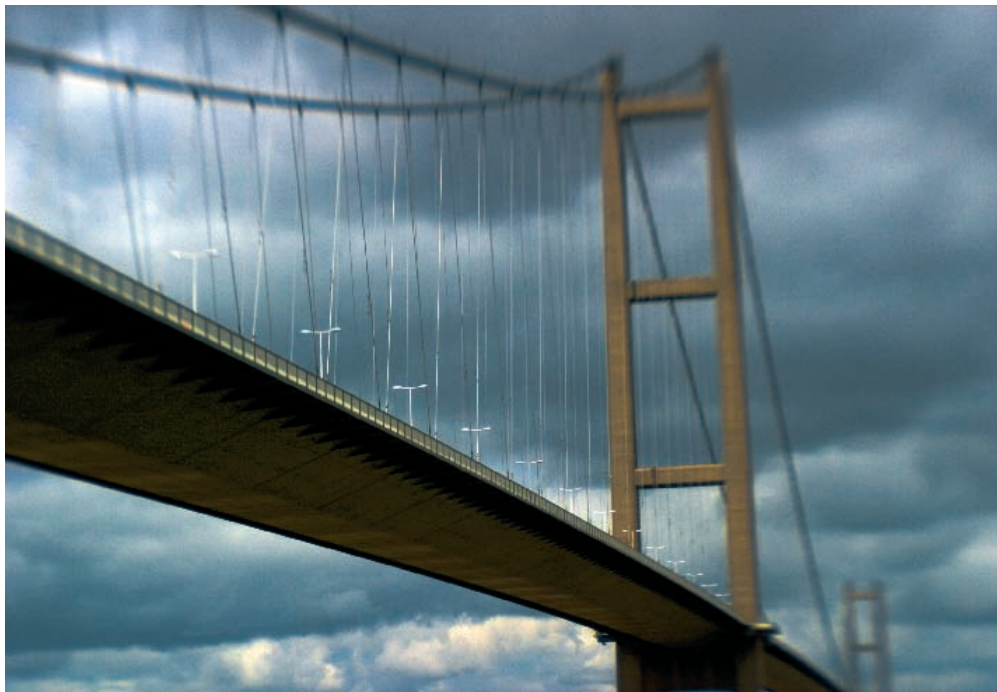
### LENSBABY 3G

Lens mounts available – Canon, Nikon, Pentax, Sony **£200**

By applying pressure to the front of the Lensbaby you can create a 'sweet spot' of focus to great creative effect.

### PROS AND CONS

- ✓ Can create some great dream-like effects.
- ✓ Gives you an advantage over many rival photographers.
- ✗ Can be rather fiddly to set and keep in position.
- ✗ Slight reduction in overall image quality.



## Fisheye lens

The last accessory we have here is actually a lens in itself but its niche place in photography means that it's more at home in this section than with other lenses. A fisheye lens is simply an extreme uncorrected wide-angle lens, which means that the edges of the frame bend around, heavily distorting everything in those areas. Fisheyes are most commonly found in the hands of extreme sports photographers but can be used to great effect in most types of photography. They're usually fairly expensive pieces of kit, especially when you consider that you won't (or at least shouldn't) be using it that often. There are plenty of fisheye attachments designed for specific compacts or SLR-style cameras available, but the range for D-SLRs is extremely limited, leaving the only real option as buying a proper fisheye.



### PROS AND CONS

- ✓ Offers an extremely wide perspective of the world.
- ✓ The fisheye distortion can be used to great creative effect.
- ✗ Very expensive for what is a niche product.
- ✗ You need to be careful not to get your size nines included in the frame.

### CIRCULAR OR DIAGONAL?

Fisheye lenses come in two basic types – circular and diagonal. A circular fisheye will produce a circular image in the frame, with black space around the circle. This is the most extreme type of fisheye lens but the circular image rules it out for use in general-

purpose photography. A diagonal fisheye, on the other hand, will completely fill your frame with the image but the fisheye effect will be less pronounced. If you are looking to invest in a fisheye lens, we'd suggest that you look at the diagonal kind.