

Canon EOS edition

Beginner's Guide to Flower and Garden Photography

A simple, modern and non-technical approach to using your Canon EOS camera to take striking images of plants, informal garden scenes and formal horticultural displays

Nina Bailey



About this book

This book, part of my Beginner series, is ideal if you are new to using an interchangeable lens camera, like the Canon EOS models, and you are looking to learn photography by getting out there, shooting subjects and learning as you go. It's a more enjoyable way to learn and, by taking images, you learn very quickly what does and doesn't work.

It's also useful if you're struggling to get consistent results of flowers, plants as well as wider garden scenes with your camera and want to concentrate on the final results, rather than being in full control.

So many books for beginners concentrate on the basics of photography which, although they are incredibly important, can be uninteresting and complex to learn. Your Canon EOS camera offers features which allow you to shoot a range of subjects automatically, leaving the camera in control of many of the basic settings. The advantage of this is that you get used to seeing, framing and capturing your subject.

As this book is written specifically for Canon EOS cameras, this means you can learn how and where features are set on your camera. I've been teaching Canon EOS photographers exclusively for over 20 years, so I understand how your camera works, what each of the settings does and, more importantly, how to use them to get the results you want.

With this book I explain the settings to get you started so you can get out and shoot. To reinforce what you're learning at each stage, there are practical assignments.

The great thing about photographing flowers and gardens is that it's a highly accessible area.

The equipment requirements are very simple, meaning that the camera and lens you already own have the potential to give you great results. The benefits of other equipment are explained – gear that you may want to put on your wish list as your skills improve.

Subjects are often plentiful, especially in the UK where I'm based, and if you're lucky enough to have an outdoors space to call your own, you don't even have to go far to get started.

This book will help you realise your camera's latent potential and will give you the skills you need to progress further if and when you want to. Later in the book I will explain some of the more commonly used settings for this type of photography and why they will start to be your favoured settings as you become more familiar with your camera.

This is not designed to be an all-encompassing book on shooting flowers and gardens, but to set you on your photographic journey of these very rewarding subjects and allow you to see what your camera is capable of as you start to take control.

Happy shooting,

Nina

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About the author

Nina started her career in the retail sector of the photographic industry and then moved to Canon UK where she had a successful nine years looking after training, exhibitions and marketing both in the UK

and also within Europe. This gave Nina an unrivalled knowledge of not only the Canon EOS system but also how to develop and enhance the skills of photographers of all ability levels.

Nina started her own business in 1999, concentrating on training for amateur photographers. She is also at the forefront in developing the EOS Training Academy both online and within its practical day courses. In 2014 Nina started producing her own range of ebooks to bring photography training to an ever wider audience. In 2015 Nina became Technical Editor for EOS magazine and produces articles and images for each issue. In 2017 Nina launched the ever growing range of Pocketbooks, which are small A6 pocket sized guides designed as aide-memoires to go with you when out shooting.

Nina started taking images when she was very young and is still a very keen photographer, both professionally and personally. Nina loves travel, landscape and wildlife photography and still shoots occasionally commercially though most of the images she shoots these days are for her own extensive range of books.



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About photographing flowers

About photographing flowers and gardens

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In the UK, we live in a country where the climate allows plants from all over the world to thrive and flourish. As a result our parks and gardens are renowned worldwide for the wide range of plants that can be seen. Even in our gardens, many of the plants we grow originate from far flung places such as China, India, Australia and even parts of Africa. The image on this page is a Day Lily or Hemerocallis which originates from Asia, yet is commonly seen in many UK gardens in the summer months.

With such an abundant source of subjects this is one of the easier types of photography to get started in. For many it will just involve taking a step out into the garden.

This is also one of the areas of photography which can be done at any time of the day, in fact a slightly overcast, but warm summer's day can provide ideal lighting for your subject. So early starts or staying out late is not required.

Many of the plants that we see in the parks and gardens are quite large in size and this means that



great results can be achieved with just a basic camera with the lens that was supplied with it.

I have included how to photograph gardens within this eBook as that is a natural progression from taking images of just the flowers themselves. Once again only minimal equipment is needed to get great results.

Both the images shown here were taken on a day that was warm and sunny but where the sky had very

thin milky clouds, which would have made it difficult to shoot more general landscape shots. However in this type of photography, it is possible to keep the framing tight enough to minimise problems with sky burnout and so even shooting on a much more overcast day is easily possible.

This is an area of photography where your choice of subject can affect the simplicity or complexity of taking the image. The major thing that affects this is the size of the subject that you choose to

About photographing flowers and gardens

photography and how much you want to fill the frame with just a single bloom or even just part of that subject.

If we choose to shoot a cluster of flowers or even part of a flowering shrub then the capture remains easy as the magnifications that we are shooting at remain fairly low.

As we move closer then the magnification that we are shooting at starts to increase and in many instances we will also be shooting closer to our subject and this will make getting the flowers completely sharp harder. There are times when you only want the key flowers sharp and the background blurred as in the image below. Much of the control for the effects that we are getting will come from the lenses that you choose to use, as much as from the camera settings.

This makes flower photography an ideal area to really learn and understand the effects that your lenses, and in some instances the settings available on the camera, have on the images that you are taking.



Photographic tip

Gardens and the plants in them will change dramatically throughout the seasons, therefore visiting a nearby garden about once a month will provide you with very different images on each visit. Even in the middle of winter there are still plenty of subjects to be able to photograph and many of the big horticulture centres have glass houses that provide great subjects all year round.

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Choose your day carefully

Although you can take great images on a more overcast day, a bright sunny day will give you a lot more light to shoot with. It also allows you to shoot at some more unusual angles such as looking up against the blue sky for the image of the roses at the top.

However, a day with plenty of light is not the only thing to think about. In the UK we can have a lot of wind, especially in the spring and autumn months. This is going to make the plants move about and that makes getting them in focus difficult due to the amount that they are moving. Especially the ones with the longer stems that are more flexible. So you need to look for a day that has either no wind or just a very small amount that minimises the amount of movement that you are getting.

If there is a breeze, try to find plants that are in a sheltered position where they are not as affected and wait for the gaps between the gusts to take the images.

If the plants are moving a reasonable amount I normally try and shoot more general shots so that the images are not affected by the movement as much. If trying to shoot frame filling shots of very small flowers on a windy day, it can be almost impossible to get sharp results due to the amount that the plants will be moving.

Most of the smartphone weather apps, such as the one from the Met office (UK) will give both a continuous wind speed and a gust speed – if either is above about 10 mph, shooting close up shots is going to prove difficult.



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Using the lens to frame the image

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If you are photographing general garden scenes the photography can be very simple enough to allow you to just point and shoot.

If photographing the plants, the level of difficulty will depend on how close you plan to get and what lens you are shooting with.

In the left hand image I have taken the whole plant, which shows where it is growing and how the leaves



look. This was taken on the EF-S 18-135mm f3.5-5.6 IS STM set to 60mm and has captured most of the scene sharp. The 60mm setting on the lens used from further away allows me to control how much background is captured in the image.

In the centre image it has been easy to get the foxgloves sharp. The lens used, the EF-S 18-135mm f3.5-5.6 IS STM, was set to 85mm and this has



allowed the flowers to be captured sharp but for the background in the image to be slightly out of focus, which has enabled the foxgloves to stand out.

The right hand image was taken with a EF-S 55-250mm f4-5.6 IS STM lens set to 235mm which has allowed me to fill the frame with just a small part of one of the flowers. All three images were taken standing in the same place.

Getting closer

The images we looked at on the previous page were general shots and only the one on the right hand side would be considered as close up photography and even then it is taken at a fairly low magnification.

As we start to shoot smaller subjects the difficulty of getting the subject all sharp increases.

The image below is taken at what would be considered a close up setting, this is capturing the plant at about 1/5 life size. This image could have been taken with almost any standard or telephoto zoom lens. The other images on this page are all taken with a specific macro lens and are taken at a life size magnification or 1 to 1.

Once we move from taking close up images to shooting with a specific macro lens the technical difficulty of getting the shot increase dramatically, requiring very specific settings on the camera to achieve getting the whole subject sharp. However there are not that many subjects that need this level of magnification and so I am going to concentrate on close up photography in this book.



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Assignment - Start researching locations

The very first assignment is not actually a practical one. It's about thinking where to go and shoot the images. There are lots of gardens in every part of the UK.

A good website to find out what is available locally is the website great British gardens. This lists the gardens by county and provides links to the gardens own websites.

www.greatbritishgardens.co.uk

It is also worth taking a look at the website for the national gardens open scheme, these are mostly private gardens, some small and some large that open for charity just for a day or sometimes a couple times a year. The one thing to bear in mind with these is that they are people's private property and so ask to check that they do not mind you taking pictures. Most do not but it is a courtesy to ask.

www.ngs.org.uk

The RHS operates a number of great gardens around the UK and so if you live near to one of these they are great places to go and shoot. They can be very busy at weekends and so try and visit during the week if at all possible. If you live near enough to visit regularly then it's well worth becoming a member as there is then unlimited free admission to all of its gardens.

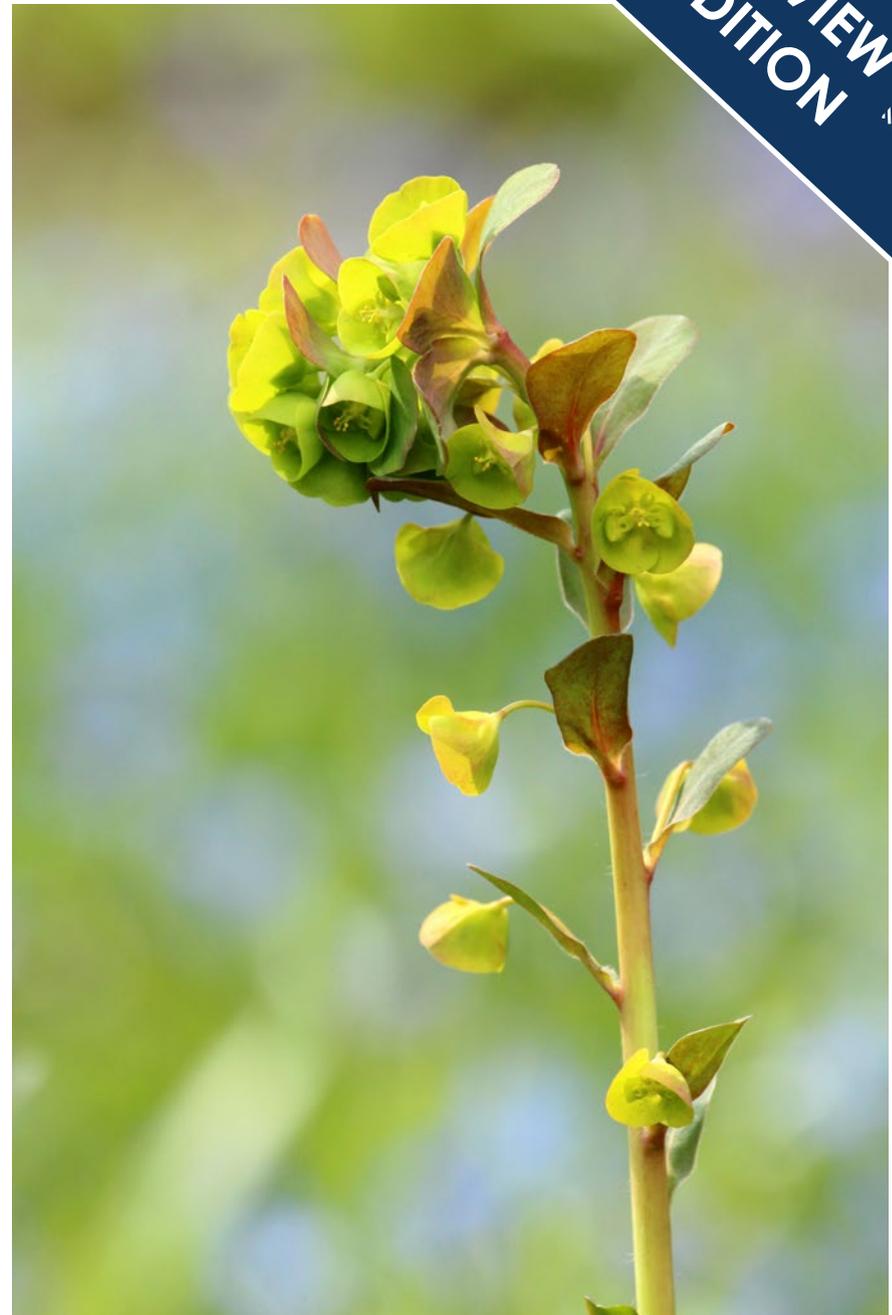
www.rhs.org.uk/gardens

The National Trust owns over 200 gardens all around the country which are open to the public. If planning to visit a number it is well worth becoming a member as then it is free admission to all of its properties.

www.nationaltrust.org.uk/visit/places/gardens-and-parks/

If you live near or in London then Kew Gardens is an obvious place to go to photograph a wide range of plants. Kew has a number of glass houses and so there is interest throughout the year and lots of places to still shoot away from any wind or rain and so more weather proof than many of these locations.

www.kew.org



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Equipment requirements

Camera choice

Flowers and gardens are static subjects and so any of the cameras within the EOS range will cope well.



The models that are more tricky to use for this type of photography are the mirrorless EOS M-series. Although very small and light, and able to take the full range of EF and EF-S lenses via an adapter, the reliance on viewing the images on the rear of the camera rather than through an optical viewfinder, does make the handling and indeed the shooting of images in bright light, much more difficult. Especially as when shooting many flowers the camera is pointing down and you have the sun shining right on the rear LCD screen.

The smaller lighter models that feature the APS-C or 1.6x crop sensor have the advantage that the increase the size of the subject in the frame due to the crop effect that they give makes it much easier to fill the frame even with some of the smaller subjects without the need to go to the macro lenses or specialist accessories. Some of the more basic lenses for the crop sensor models also feature extremely good close focusing capability.



All of the EOS camera models allow enough configuration to allow an image like the one of the rose above to be taken. The lens used for this image was the EF-S 18-55mm f3.5-5.6 IS STM which is the basic kit lens supplied with most EOS models.



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Explanation of sensor size

Within the EOS range there are currently two sizes of imaging sensor. The sensor is effectively doing the same job as film used to do – capturing the image.

The full frame or 1.0x sensor is roughly the same size as a frame of film – 24mm x 36mm. The models that have these are mostly at the more expensive end of the range and are generally preferred by professional photographers.

When digital cameras first appeared they initially used a smaller sensor, referred to either as APS-C or 1.6x crop sensor. This is approximately 22mm x 15mm in size. The 1.6x is often referred to as a magnification factor, which is incorrect, rather the image is cropped by a factor of 1.6x when compared to the image given by the full frame sensor.

The image to the right shows the difference that is made by simply changing the camera body on the same lens on the area that is being captured. The area captured is smaller, effectively 'cropping' the size of the frame captured by the camera.

The easiest way to tell which model you have is to look at the camera's lens mount. If there is a white square and a red dot marked for alignment of the lenses it is a APS-C or 1.6x crop model. If there is only an red dot, then it is a full frame or 1x model.

The mirrorless M-series feature an APS-C sensor, with the lens mount illustrated with a white dot. The EOS R-series are full frame cameras – the lens alignment mark is a red dash.

The most frequently seen are the APS-C or 1.6x crop sensors – these are found on most consumer models.



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Which is the best sensor size?

The APS-C or 1.6x crop sensor models offer a lot of advantages for flower photography. They fill the frame much more easily and so you do not need more specialist macro lenses, which keeps the cost of the outfit down.

Another benefit of the APS-C or 1.6x crop sensor models is that they are smaller and lighter and designed to take the more compact range of EF-S lenses. These all have impressive close focusing capabilities, especially the EF-S 18-55mm f3.5-5.6 IS STM kit lens which is supplied with many of the Canon EOS cameras. They do give the crop factor all through the lens range and so you will need lenses much wider than we used to use in the days of film to cope the more general garden images. However, this is not the drawback that it used to be thanks to the ever growing range of Canon EF-S lenses.

You may well be wondering why people buy 1.0x or full frame cameras. I actually have both and choose the one that works best for the type of photography I am doing at the time. The APS-C or 1.6x sensors models are great for people to get going with, being easy to use and set up and smaller and lighter to carry, especially when used with the EF-S series of lenses which are designed exclusively for them.

People who have done photography for many years, tend to prefer the full frame or 1.0x models as the lenses give the same image area as they were used to with film. The full frame models having a larger sensor also have a better low light capability. However, when you start to look at the subjects tackled by these photographers you often find that



This was taken on a 250mm lens on a APS-C or 1.6x crop sensor model. The crop factor on the sensor has made it much easier to fill the frame with just a basic lens from the EF-S range.

they are the areas that suit the full frame models better such as landscape, travel, portrait and interior photography.

Photographing flowers and gardens is an area that either of camera types will cope with. If using a full frame model it might be necessary to opt for a macro lens if you want to shoot very small flowers such as Alpines.

For a lot of amateur photographers the APS-C or

1.6x sensor models will give them the most flexible choice of body and certainly for flower photography anything that helps you to fill the frame a little bit easier is generally a good thing.

It can be important, especially if working to a tight budget to choose the body carefully as there is a one way compatibility of the lenses. The general EF range of lenses can fit any of the EOS D-SLR bodies but not the mirrorless M series bodies without an adapter.

Lens jargon and terminology

I am trying to avoid as much jargon as possible in this book, however, lenses are described in a very specific way and so I am going to look at what all the description on the lens actually means in simple terms.

The most important thing that describes a lens is its focal length. This is a number that is shown on the lens and it has mm after it. If there are two numbers, then the lens is a zoom lens and in the example shown on the right has a range starting at 18mm and going up to 55mm.

Zoom lenses are the most commonly seen in use today as they are very convenient to use and prevent having to change lens too frequently.

If there is only one number shown then it is a fixed focal length or prime lens, which does not zoom, as in the example below. In this case the lens is a 50mm lens. There are advantages to the fixed focal length lenses.



They generally let in more light and are often lighter than the equivalent prime lenses offer higher quality. However, the downside is you need more of them, which makes them larger and heavier to carry around.

For most amateur photographers starting out shooting flowers and gardens, the lenses of choice will be a zoom lens for the greater convenience of use and also to allow you to change the framing of the shot. You could manage the majority of the images you are likely to want to take with just the kit lens that camera with your camera.

This is often the EF-S 18-55mm f3.5-5.6 IS STM, however, more recently we have seen the EF-S 18-135mm f3.5-5.6 IS STM becoming more popular as a standard lens to buy with the camera when starting out, due to the longer range that it gives.



Lens jargon and terminology

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The focal length of the lens tells us the type of lens that it is and the effect that it will have on the image. Lenses can be broken down into three basic groups

Wide angle: These get more into the picture than we naturally see with the eye but they also make things look further away and smaller and so we do not use these much for flower photography but they are used for general garden scenes. Focal lengths from 35mm down to 10mm would be considered to be a wide angle focal length.

Standard: These are lenses that give the same width and appearance as we see naturally with the human eye. Lenses from 36mm up to 55mm are generally considered to be a standard focal length. These focal lengths can work well for the larger flowers and more general garden shots.

Telephoto: These are the lenses that are used for flower photography as they allow better blurring of the backgrounds. They capture a narrower area than we naturally see with the eye and make the subject appear to be a lot closer to us. Telephoto lenses technically start at 56mm but it is not until 100mm and longer that they start to be work at their best for flower photography.

Telephoto lenses can be split into two groups. The normal telephoto lenses have focal lengths from 56mm and go up to 300mm. You then have the **Ultra telephoto lenses**, these range from 400mm up to 800mm in the current range.



The images above are taken from the same spot but with the focal length changed between each shot. As the focal length gets longer you can see a smaller part being captured. The 50mm image shows the scene as it looked to the eye.

Lens jargon and terminology

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This shows you whether the lens is an EF or EF-S type. This will tell you what the compatibility of the lens is.

EF stands for Electronic Focus. EF-S stands for Electronic Focus - Short back which is the way that Canon makes the lenses smaller.

This tells you the focal length of the lens. This lens goes from 18mm which is wide angle up to 135mm which is telephoto and in between those two extremes covers the standard focal lengths as well. These days it is quite common for a lens to cover a range of focal length types in the one lens to make it more versatile.

This is the aperture range, however you are the widest aperture that the lens can achieve. This lens has a variable widest aperture of f3.5 on the 18mm setting of the lens and it can vary down to f5.6 when the lens is set to its 135mm position. This is a common feature on the more affordable lenses. Most affordable telephoto lenses suitable for wildlife will be f5.6 when zoomed in. I will explain more about the aperture shortly.

The IS indicates that the lens features Image Stabilisation which helps you to hold the lens steady making it easier to track subjects and can prevent camera shake occurring when shooting in lower light levels. This is an important feature to have as it can significantly increase the number of good images that you get.

STM is the type of Motor that is fitted into the lens. STM stand for Stepping Motor which is a fast and very quiet motor. USM is even faster and totally silent in use. If there is no motor type then the lens uses the standard micro motor type which does produce a noise when working.

This indicates the filter size that the lens takes.



About the aperture



Although only the widest aperture is quoted the lens will have a range of apertures. Most lenses go down to f22, though a few go down to f32 or even smaller. Left f1.4, middle f5.6 right f22.

The aperture is the mechanism in the lens that controls how much light is being let into the camera. It is an important part of the exposure control on the camera. It is used in conjunction with the shutter speed and ISO settings that we will look at in the settings chapter. Although it is found in the lens, the camera is controlling the setting that are being used.

It also modifies the depth-of-field that the lens gives. This is how much is sharp from front to back within the image. Though this can change a lot more by changing the focal length of the lens than by actually changing the aperture setting. The smaller the flowers that we wish to photograph the more important it becomes to set a reasonably small aperture, f11 or f16 to get all of the flower sharp. I will look at this in more depth in a later chapter

As we have just seen, the front of the lens displays the widest aperture(s) that the lens offers. Of course all lenses have a range of apertures, but the widest setting is important as it indicates how well the lens will work in lower light levels.

The camera always focuses with the aperture wide open and then closes immediately before the image

is taken. This allows you to have a brighter view through the viewfinder.

Therefore the widest aperture available on a lens also has a bearing on how well the camera's focusing will work. The cameras mostly need an aperture of f5.6 as a minimum for its focusing system to work correctly and so you will never see a Canon lens with a widest aperture smaller than this. Some independent lenses do not open up as wide as this when used on their longest focal length. A widest aperture of f6.3 is commonly seen and can result in a very temperamental focusing performance when the lens is zoomed in to it fullest setting.

However, there are some professional models, namely the 1D series, 5D Mark III, 5DS models and the 7D Mark II that will allow focusing down to f8, this is principally to allow the use of extenders on some of the longer range L series lenses. This can also assist with getting some of the accessories we may use such as extension tubes to focus more consistently.

However this significantly drops the performance of the focus system when the aperture drops down to this level.



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eBooks for your EOS photography

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