LANDSCAPE PHOTOGRAPHY: SHOOT LIKE A PRO

How professionals shoot differently to ensure consistent results

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Lenscraft® Photography

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Introduction

Are you reading this, looking for a book to help improve your landscape photography? Perhaps browsing the virtual shelves of your favourite online bookstore or flicking through the pages of books in a real bookstore. Either way, if you've already looked at a few books you may have noticed a pattern in their content.

Initially, they might discuss the camera equipment you need to shoot landscapes well and perhaps some of the accessories. After this, they discuss some of the basic techniques to use when photographing. Then they will probably move on to discuss the different types of landscape and how to shoot them. You may also find a scattering of tips and advice about composition throughout.

If you're already a keen landscape photographer, you might find yourself nodding in agreement but not finding much new. But if you're new to landscape photography you might feel enthused with this newfound knowledge and are keen to try it out. Then, when you venture out on your next landscape photography trip, you find your results are much the same as they usually are. The reason is that you're not approaching your landscape photography with the mindset of professional photographer. It doesn't matter how much you learn,

if you don't change your approach, you're going to make slow progress.

Professional photographers go about their work differently to the enthusiast. They must, because they need to make it pay. They can't waste time and money travelling to a location in the hope of getting a shot. They need to be in the best locations and at the right time to capture great light. And guess what, they don't leave all this to chance.

As the title of this book suggests, it's a little different from most books that try to teach Landscape Photography. My aim is to help you adopt a more professional approach to photographing the landscape. There's a lot we can learn from understanding how professional landscape photographers work. Have you ever stopped to ask yourself how the professional can produce technically excellent images? How do they achieve consistently great images from each trip they make? Why do they always seem to get lucky and find the best light when you wait for hours for nothing?

If you think this difference is down to luck, think again. As this book explains, it's the different approach they adopt to photographing landscapes that makes the difference. An approach that differs in the equipment they buy, the locations they visit and when. These things make a significant difference to their results and they are things that you can do too.

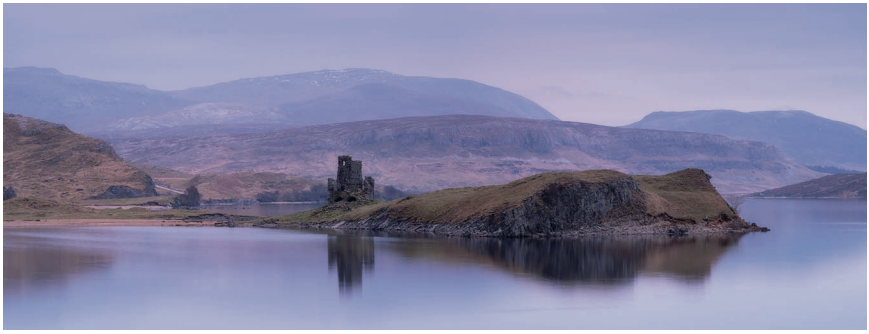
Is this Book for Right for You?

This is a book about adopting a professional approach to landscape photography, but you don't need to be professional photographer to benefit. You don't even need to want to be a professional to benefit, you just need to have a desire to shoot great landscape photography.

Its aim is to help beginning and intermediate level photographers shoot better landscape photography. It contains a lot of the basic advice that you will find in other landscape photography books. It needs to, because you need to have the right foundations. BUT this

book also contains lots more advice that you probably won't find published elsewhere.

This is a very different landscape photography book to most others. It will make you a better landscape photographer if you implement what you learn. You may have a run of bad luck from time to time but follow the advice and you will greatly improve your odds of shooting great landscapes.



The Structure of this Book

There are four sections in this book:

Section 1 looks at the equipment that will help you in landscape photography. This covers the camera, lenses and most importantly accessories. You will learn what equipment to invest in to achieve good results and where to be careful. We will also look at how to best use your equipment when taking photographs. I frequently encounter photographers who have very expensive equipment but don't know how to use it well. They somehow think their problems are related to their camera and that changing camera will make them a better photographer.

Section 2 examines the importance of planning and how to understand and forecast great light. Frequently overlooked, this important subject has the power to transform your photography. By following the advice in this section, you will greatly improve your odds of coming away with successful photos from every trip.

Section 3 explains shooting techniques you can use in your landscape photography. This explores more advanced techniques like multiple exposures and focus stacking.

Section 4 discusses how to create compositions in landscape photography. By evaluating several photographs in detail, you will learn important compositional "rules". The section also includes an explanation of how to apply some of the most powerful techniques.

There's also an important fifth element to successful landscape photography which is post processing. This will be the subject of a future book which I'm presently developing. The importance of photo editing can't be overstated and requires a dedicated book to cover it well. It's also important that you start your editing with a high quality, well captured image. That's why I've published this book first.

One final point is that I would encourage you to visit my website and sign up to receive my monthly newsletter. I always try to include helpful and inspiring material from around the internet. You'll also find past editions of the newsletter on this page.

https://lenscraft.co.uk/lenscraft-photography-blog/photography-newsletter/

I hope you enjoy this book and that it helps to improve your landscape photography.

Robin Whalley

Landscape Photographer & Author

SECTION 1:EQUIPMENT IN LANDSCAPE PHOTOGRAPHY

Whilst planning this book, I was a little apprehensive about including this section. Equipment is very subjective, and photographers will never stop arguing over the smallest of details. Often the disagreements are over the most trivial of points when at the end of the day it doesn't make any perceivable difference to their results.

Despite my reservations, equipment is important and there are lots of mistakes you need to avoid. It's important that we approach the subject of equipment like a professional photographer would. We should spend our money on the things that matter, and which help us to take better photographs. We should also avoid spending money on things and features that we don't need. But most importantly, we need to use the equipment we do have properly. That's what this section of the book is all about.

ONE

The Camera and Lenses

Before discussing the technicalities of cameras, it's important to understand the objective of the chapter. This chapter won't tell you which camera is best for Landscape Photography. There are more than a few websites that try to do that. Instead, we examine the important camera and lens features for landscape photography.

That said, none of the features we discuss are essential because it's the photograph that ultimately matters. It doesn't matter what camera you use. If the image is a great image, then that's what counts. You can capture great images with any camera including your phone. All more expensive cameras make possible is better image quality. And even then, you will see diminishing returns as you spend increasingly large sums of money.

REMEMBER, it's possible to take great shots using any camera. Some cameras are just better to work with, and they aren't always the most expensive.

Camera Formats

Cameras come in different formats, which usually relates to the size of their sensor. In the film days we had a similar thing where the size of the film determined the format. Typical examples were 35mm, Medium Format (4.5cm x 6cm, 6 x 6, 6 x7 etc) and Large Format (4" x 5", 8" x 10"). Professional landscape photographers tended to favour the Medium and Large Formats because of the increased quality. But there were some great photographers like Gallen Rowell who shot mainly with 35mm. There was a lot of snobbery and one-upmanship around equipment (possibly encouraged by camera manufacturers) and I'm sad to say some of this has carried over into the digital era.

The advice that's often given about the best format for landscape photography is to use full frame. Whilst there may be some benefits to using full frame, the case for using full frame isn't as clear cut as many wold have you believe. Buying into full frame system also has a few drawbacks that you should be aware of before you rush out to spend your money.

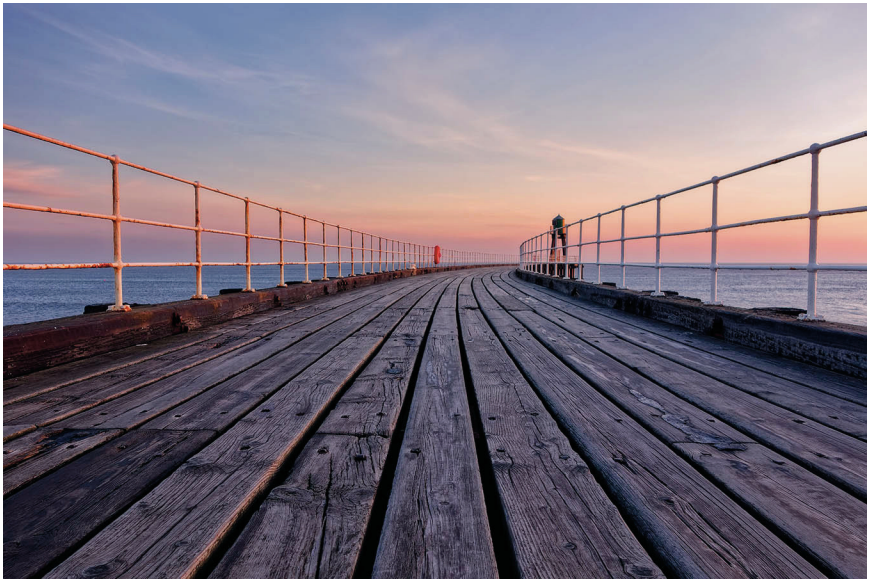
The most common digital photography formats currently available are:

- 1" Sensor
- Micro 43
- APS-C or crop sensor
- Full Frame

"Medium format" digital cameras are now also starting to become more popular as the equipment comes down in price. Despite this, it remains well out of the budget of many people.

The 1" sensor is usually found in compact and bridge cameras like the Canon G7X and Sony RX100 and RX10 ranges. Providing the lens on the camera is high quality, you can achieve very good results when photographing landscapes with this sensor. It's relatively easy to make a very good A3+ print from a well exposed image using one of

these cameras, and they are more than good enough for internet viewing.



Example image captured with a 1" sensor compact camera

Images from this sensor do have limitations but these are not nearly as poor as many people would have you believe. The limitations you're likely to encounter are:

- Lower dynamic range. The dynamic range is the range of tones the camera can capture in a single shot, measured from the darkest to the lightest. Whilst there are variations between manufacturers, cameras with full frame sensors tend to have a greater dynamic range than those with smaller sensors. We will revisit this topic later in the book to discuss some solutions you can use when you find the dynamic range of a scene is too much for the camera.
- When you edit a RAW file from smaller sensor camera, the image quality can break down more quickly than RAW files from full frame sensors. This seems to be more of a problem

when trying to recover or lighten dark areas of an image. If you take care to capture a good exposure this may not be much of a problem.

- Increased lens distortion requiring greater correction in post capture processing. The greater lens distortion is partly connected to the smaller sensor size. As sensors become smaller, they magnify the image which requires the lenses used with them to be even wider. A good example is to compare a 24mm wide-angle lens on a full frame sensor. To achieve the equivalent 24mm field of view on a micro 43 sensor you would need to use a 12mm lens. The 1" sensor is smaller again, requiring a lens around the 9mm focal length to achieve the same field of view. But as the lenses become wider, they create greater image distortion. You can correct the distortion in software, but this can also degrade the image quality.
- Smaller sensors tend to produce more image noise when compared to larger formats, especially in shadow areas if you lighten them. This image noise will probably also become more noticeable at an earlier stage when increasing the camera ISO setting. Larger sensors generally produce cleaner images but there will also be variation between manufacturers.

Despite these limitations, don't be put off by the thought of using a 1" sensor to shoot landscapes. These cameras when used correctly can produce excellent images. But if you're heading out to buy a new camera for landscape photography and size and weight isn't important, cameras based on a 1" sensor probably shouldn't be top of your list.

Smaller sensor cameras also have advantages for landscape photography. One of these is an increase in the depth of field you can achieve at a given aperture. This is something we will be covering later in the book.

Next up in the sensor size list is the Micro 43 camera. This does give

some advantages over the 1" sensor but probably not as much as many might claim. You will encounter some of the same limitations as mentioned for the 1" sensor but they aren't as severe or noticeable.

Personally, I have captured many landscapes shooting with Micro 43 sensor cameras. Many people (often those who haven't used these cameras) are critical about their performance. When speaking at camera clubs I show some A2 prints of my work. Some are from an Olympus Micro 43 camera and others a Nikon D800. Very few people were able to pick out which images came from the Micro 43 camera and if they can, they can't explain how to tell the difference.

Example image captured with a Micro 43 camera

Part of the poor reputation for Micro 43 cameras may be attributable to two problems:

1. In the early days of these cameras some models suffered quite a bit from image noise.

2. When Micro 43 started to become popular, some manufacturers were shipping poor quality kit lenses with some cameras. But when you switched the poor-quality lens for a good one, the results were excellent. Despite this, I remember reading articles at the time criticising the quality of Micro 43 cameras when they were testing them with these poor-quality lenses.

The micro 43 format is a viable option for photographing landscapes providing you don't want to make huge fine art prints. If you regularly want to print photos larger than A2, you may want to consider a larger sensor.

The next sensor sizes on the list are APS-C and then Full Frame, the problems mentioned above start to disappear, but others may become noticeable. One reason that I personally liked and used the Micro 43 cameras for a long time was they were small. In comparison to a full frame system (especially when you take the lenses into account) they are tiny. This makes them ideal cameras for travelling and hiking. Something else you will learn about later in this book is that smaller sensor cameras have an advantage when it comes to capturing depth of field.

The reality is that you can use any camera to shoot landscape photography. What matters at the end of the day is the image. There are far too many photographers in clubs and in forums who will spend hours arguing over which is the best sensor format to choose. Leave them to it and invest your time in learning to take great photos.

If you do decide to buy a new camera and are wondering which format to choose, here are a few points to remember:

1. No sensor size is as poor as its critics will claim. You can produce excellent quality images with any.
2. Image quality is determined more by lens quality (and to some degree the camera design) than it is by the sensor size.
3. No camera is without its faults and limitations. You need to

learn what these are for your camera and then understand how you can best work with them.

Incidentally, in case you're wondering, I have used all the sensor formats discussed above. My main current camera is a Fuji X-T3 which utilises the APS-C sensor format. I chose it because of the balance of size, weight, ease of use and image quality. The system also has a great selection of quality lenses. I my decision making I never considered that the APS-C format wasn't enough.

The Pixel Myth

Now let's talk about the number of pixels you need for Landscape Photography. This is one reason why many landscape photographers like to use a full frame camera. Larger sensors can fit in more pixels and tend to have a larger pixel count. But do you really need more pixels?

Larger format sensors tend to have more pixels, but as the number of pixels increases their size decreases. More pixels can also increase the processing power required by the camera as well as increase the noise levels. The more pixels you pack into the same area of sensor the more it causes interference noise which then requires more processing power to remove.

The excellent mirrorless Sony camera range provides a good example of the impact of sensor size. For some models such as the A7, Sony produce different versions with different pixel counts. I owned a full frame A7R for a while which had a 36Mpixel sensor. My friend bought the A7 which was also full frame but with a 24Mpixel sensor. Comparing the RAW files from both, the A7R images were larger but had more image noise. The 24Mpixel images also had a nicer quality to the colours that's difficult to describe in words but which you could see.

Shortly after we did this comparison, Sony released the A7S. This also had a full frame sensor but was only 12Mpixels. The reason they reduced the pixel count in this camera is that they wanted to increase

the low light performance. By increasing the size of the light receiving photo sites on the sensor the camera became better at capturing the available light.

You could find that having more megapixels requires you use better quality lenses. What I have also found when using cameras with high pixel counts is that they become more susceptible to vibration. Vibration can come from the wind or your hands. Even when you have the camera mounted on a tripod, vibration from passing traffic or people moving around can sometimes cause issues.

Most of the 1" sensors are currently at 20MPixels which is more than enough for shooting great landscapes and printing them at up to A2 size. In the Micro 43 world the pixel count is in the region of 16-20MPixels. You can produce excellent A2 prints and good 30" prints from these image files. If you find yourself choosing a 45Mpixel Full Frame camera because it will resolve more detail you will probably never notice the difference unless you're printing at A2 or larger. In fact, many people who own full frame cameras probably never print beyond A3 and many may only show their work on the internet or using a data projector at a camera club. In this case, they would be better buying a camera with fewer megapixels and investing the saving in better quality lenses.

If you have a 24Mpixel full frame camera producing a 6000 x 4000-pixel image, reducing this to 1,200 or 2,400 pixels for internet viewing will throw away the rest of the pixels. There is no difference in image quality when compared to an image coming from 16Mpixel Micro 43 camera. You certainly won't be able to detect any additional detail as some will claim.

Learning Points from the Professional

So, what would the professional do when purchasing a new camera?

Their priority would be to find one that met their needs and not their wants. They certainly wouldn't pay a premium for features they didn't need. This could mean favouring the small size of the Micro 43 or

APS-C cameras over Full Frame. Megapixel count would probably not be a buying decision unless they required the additional pixels for a purpose. Even very fussy stock libraries accept images from Micro 43 cameras and some even from high quality compact cameras.

A professional will work out what camera features are important to them and why. For example, I recently purchased a Fuji X-T3 body when I could have purchased the less expensive X-T30. The X-T30 has the same sensor as the X-T3 and its smaller and lighter. I opted to pay more for the X-T3 because it has weather sealing which is very important to me. I shoot a lot in poor weather conditions and need a weather sealed body and lenses.

Something else you will find is that when a professional invests in a camera body is that they use it for a long time. They won't change it just because a new model launches, unless that new model has a feature they really need. Even then they might keep the old camera as a backup body.

Cameras depreciate quite quickly, especially when a manufacturer launches a new model. Newly launched cameras tend to be priced at a premium. Good new and used examples of the earlier model can be purchased at large discounts over the new price. If you need a camera, buying a used one from a known dealer (who offers an exchange or refund) may be the most cost-effective way to buy. When a new model launches many dealers have excellent used examples of previous models. These are often like new and have very low shutter counts.

Professionals also don't like changing cameras much for another reason. It takes time to learn a new camera and to understand its quirks. Any level of uncertainty with how the camera operates will get in the way of picture taking. You need to be able to rely on your camera and know that when you take a shot you have nailed it. You don't want to then be thinking about bracketing in case you don't have the exposure right and then find you're not sure how to use the bracketing feature.

This is one of the reasons that I've remained with the Fuji X-Series of

cameras. Each new camera from the X-T1 to the X-T3 has all the controls in the same place. The menu system looks and feels the same and I instinctively know where to find a dial or switch. I can even swap batteries between the different models.

Professionals also tend to stick with a manufacturer, and it can take a lot to persuade them to switch. Part of this could be to reduce the differences in camera operation. If you have ever tried to switch between say Nikon and Sony, you will find yourself struggling at first to remember where to find some of the features.

But perhaps the biggest reason for having loyalty to a camera manufacturer is the investment in lenses. Lenses are expensive and selling all your lenses to switch to a new system carries a higher degree of risk. When you have lenses you like, you should stick with them.

Lenses

In landscape photography, image quality is important and the key factor in determining this is lens quality. But that doesn't mean you should rush out and buy the "best quality lens" for your camera. For one thing, the "best quality" is very subjective. What it does mean is that you're usually better off investing your money in buying quality lenses than upgrading to the latest camera features.

We can categorise lenses broadly into two types, Prime and Zoom. A prime lens has a fixed focal length that you can't change, for example 24mm or 50mm. With a zoom lens you can change the focal length of the lens within the zoom range.

The focal length of the lens controls how wide a field of vision the lens has, and we can break this down into three broad groups. Wide-angle lenses are usually in the range of 35mm or less. Standard lenses are in the range 35-70mm and Telephoto is anything beyond 70mm. Don't worry about remembering this as it's only a rough guide for what follows. We'll be returning to look at focal lengths in greater detail, later in the book.

The advice that you'll often see shared is that prime lenses have better

image quality than zooms, which is mostly accurate. Prime lenses only have one focal length they're optimised for and distortion's minimised. A zoom lens by comparison needs precision moving parts and it becomes more difficult/expensive to make a lens that's great across the focal range.

Prime lenses do have their use in landscape photography, but most people will find it easier to work with zoom lenses. Probably the most obvious advantage of the zoom is that you can adjust the focal length to assist in refining a composition. With a prime lens you have a fixed focal length which may mean changing your position and even compromising the composition. If you're working with a tripod changing position is an added complication that you don't want.

When choosing the focal range for a zoom, think about the total focal range that you like to work with. This will go from wide-angle to telephoto. In landscape photography, the wide-angle lens tends to be more useful than the long telephoto. Now consider how many lenses you want to cover this focal range. Depending on your camera you may be able to do this with a single lens, but this isn't usually a good idea. The longer the focal range covered by a lens, the more optical compromises it probably makes. Think back to the focal range categories of wide, standard and telephoto. If you're covering more than two of these with a single lens, it will probably have quality compromises in the design.

There are however benefits to having fewer lenses. For one, your overall spend on lenses may be less. You also have fewer lenses to carry which might be important, for example when travelling. In my own landscape photography kit, I tend to carry three lenses for the Fuji X-T3. These are the Fuji 10-24mm f/4.0, Fuji 16-55 f/2.8 (or Fuji 16-80 f/4.0) and Fuji 55-200 f/3.5-f/4.8. I have other lenses, but this equipment provides a nice balance between quality and weight.

Tip: Long telephoto prime lenses can be ridiculously expensive and have limited application for landscape photography. If you're going

on safari or do a lot of wildlife photography, they may be more valuable. Before investing in one of these lenses ask yourself if you really will get your use out of the equipment. Would you be better renting the lens you want for a short period rather than buying it?

The Lens Aperture

The aperture in a lens is the hole that allows light to pass through to reach the camera. It's measured in f-stops and will have a maximum and minimum range. When the aperture is at its maximum the hole letting the light through is as wide as possible. When its at its minimum the hole is as narrow as it can be.

A typical example of a lens specification is "Max aperture: f/4.0 Min aperture: f/22.0". This tells us that the widest aperture is f/4.0 and the narrowest is f/22.0. If you look back to my list of lenses above, you will see the wide-angled lens is a Fuji 10-24 f/4.0. It's the f/4.0 in the lens name that tells you the widest aperture of the lens.

When the lens is on your camera and before you take a photo, the lens aperture will be wide open at its maximum. This allows the maximum light to reach the camera, making it easier for the camera autofocus to work. If the maximum aperture for your lens is f/2.8 rather than f/4.0 we say the lens is brighter or faster because it allows more light through. Remember, although the aperture number is small, that indicates the widest aperture. When the light conditions are very low, the camera may struggle to focus and lock onto a point with the f/4.0 lens, but it could work well with the f/2.8 lens.

If you're going to be shooting a lot in low light conditions and/or you rely on quick focussing with the camera's autofocus, a bright/fast lens may be best. But in landscape photography we tend to work from a tripod and don't need fast focussing. Faster lenses are also more expensive. To give an example, I once bought a Canon 70-200 f/4.0 lens. I could have purchased the Canon 70-200 f/2.8 lens, but it was more than twice the price. The only difference between the two was the maximum aperture which as a landscape photographer wasn't impor-

tant to me. If the camera struggled to focus, I would switch to manual focus using a technique we'll discuss later in the book.

Tip: Unless you have a specific need, don't buy fast lenses. A maximum aperture of f/4.0 is fine for most landscape photography. Astrophotography is an exception to this but then it's also a more specialised area of photography.

Another consideration in relation to lenses and the maximum lens aperture is whether it's a constant aperture or not. With some zoom lenses the maximum aperture is constant across the entire zoom range. For example, my Fuji 16-55 f/2.8 has a constant maximum f/2.8 aperture at all focus lengths. It doesn't matter if I set the focal length to 16mm or 55mm. In contrast, the Fuji 55-200 f/3.5-f/4.8 has a maximum aperture that changes in relation to the focal length. Set the zoom to 55mm and the maximum aperture is f/3.5. As you zoom to 200mm the maximum aperture slowly increases until it reached f/4.8.

It's more expensive for lens manufacturers to create lenses with a constant aperture across the zoom range. Constant aperture lenses also tend to be higher quality because of the expense involved. In the example of my Fuji 55-200mm lens, this isn't the best telephoto zoom Fuji produce. It is though a very good lens and an excellent choice for landscape photography (if you're a Fuji user). I would however rather invest my money in buying the best wide angle and standard lenses than the best telephoto lens. That's because most of my landscape photography uses a wide-angle lens. Invest your money in the lenses you will use most.

Other Lens Features

I've mentioned investing in good quality lenses several times but haven't explained what I mean. Ultimately the lens needs to produce a sharp image across the frame, with limited distortion through the zoom range. What it doesn't need to be is amazingly sharp. You can easily find how well a lens performs by searching lens test charts but treat these with caution. It's easy to think the sharpest lenses are the best but they aren't always. There are other things to consider.

As well as being sharp, a good quality landscape photography lens will have a few other features to consider:

- Does the lens have image stabilisation? Stabilisation helps you shoot with the camera handheld at slower shutter speeds than would otherwise be possible. Although as a landscape photographer much of your photography will be from a tripod, there are times when you'll want to shoot handheld. The ability to shoot at shutter speeds that are 4-6 stops slower is a huge advantage. Stabilisation can be in the camera lens or the camera body depending on the manufacturer. Some have even introduced a hybrid system where both the lens and camera body work together to stabilise the image. If your camera system supports stabilised lenses, you should probably include this feature on your shopping list. If this is important to you it's another good reason to discount prime lenses as most aren't stabilised.
- What's the build and construction quality of the lens? You want a lens that's robust and that will last years. In the past I've owned cheaper lenses which feel light and use a lot of plastic. Some of these had plastic lens mounts where they attach to the camera. After a few months use, you could visibly see the lens mount wearing. Buy quality and you won't regret the cost in the long term.
- Does the lens have unwanted features? You don't want to be paying for features that you don't need or that could break more easily. The one that I try to avoid is the power zoom

where the zoom mechanism is motorised. I find this feature much more difficult to work with than a mechanical zoom. It's only a bonus for video work where you need smooth zooming.

- Is the lens weather sealed? If you're going to be out in the landscape in all sorts of changeable weather conditions, this can be very important. It doesn't matter if its rain, snow, heat or dust. Having weather sealed lenses is important if you want them to last. They are likely to cost more but it's a good investment.

This concludes our review of cameras and lenses for landscape photography except for one very important point. Use the equipment you already own. Don't rush out and buy more. But when you come to purchase a new camera or lens do refer to this chapter to ensure your making a sound decision.

Now let's look at an area of equipment where careful purchasing is essential; photographic accessories.

TWO

Landscape Photography Accessories

In this chapter we discuss some of the additional equipment you should consider for landscape photography. Whilst the camera and lenses are essential to photography, it's the accessories that help you capture great images. Unfortunately having the right accessories is something a lot of photographers overlook, ignore or economise on. This is a big mistake that can significantly limit your success.

Accessories typically help you to overcome a limitation with your camera or a difficulty in taking a shot. A simple example is where low light levels extend your camera shutter speed to more than you can hand hold. It may be possible to increase the ISO setting of the camera but that would compromise the image quality. This is where a tripod comes in to provide the required support. By using a tripod, you can shoot at much slower shutter speeds and use a low ISO to maintain image quality.

The tripod is just one example of a photographic accessory that makes landscape photography easier and can improve your results. When you're first starting out in landscape photography it's easy to buy poor quality accessories. Buying quality accessories can be expensive and seem a little unnecessary. For example, most photographers

would rather buy a new camera than investing in high quality filters. But buying cheap accessories is a false economy. They may not work well, in some cases, may be even be a complete waste of money.

In this chapter we are going to examine important accessories to improve your landscape photography or make it easier. As we do this, I will explain some of the points to look out for when making a purchase.

Using Camera Supports

A good camera support for landscape photographers is a tripod and it's one of the most used pieces of equipment. Whilst it may be possible to hand hold some shots, the best light for photographing the landscape tends to produce slower shutter speeds. Without a tripod you run the risk of taking images that are shaky or blurred, unless you're prepared to compromise the image quality in some way. But remember, the best landscape photos have quality at their heart. Maintaining image quality is something that should be high on your list of priorities.

Full sized tripod

But tripods aren't just for low light conditions as many photographers seem to think. They are a tool I recommend you use whenever possible for several reasons.

1. It doesn't take much camera shake to affect an image. This is especially true if you're using high quality lenses with a high-resolution camera. These will show up even the faintest wobble which becomes easy to detect. There's a "rule of thumb" suggesting the minimum safe shutter speed is the inverse of the focal length (in full frame terms). If you use a 50mm lens, then your slowest shutter speed for hand holding should be 1/50". Despite this, it's still possible for wobbles to show up, even when using image stabilisation. This is often down to poor technique as much as having the shakes. For example, you may have a habit of snatching at the shutter button on your camera or moving the camera down too quickly when the shutter fires. By working from a stable tripod, you can minimise the risk of blurred and shaky images.
2. A good tripod allows you to improve your use of photographic filters. When using a tripod, you can position and hold the camera steady whilst you correctly align your filters. This is true for the polarising filter but especially for the Neutral Density Graduate filters (which we cover shortly). You must position these filters carefully to avoid their effect being easy to see and compromising image quality.
3. You may decide that you don't want to work with photographic filters (more about this later in the book). Instead you decide you will shoot multiple exposures and use a technique called exposure blending. Again, a tripod will help you with this. By ensuring the camera stays in the same position for each photo you shoot, it becomes easier to blend them together in post processing.
4. Some techniques (which we will cover later) such as shooting panoramas or focus stacking are more difficult or even impossible without a good tripod.

5. A tripod slows you down by making it more difficult to get the camera into position. This may sound counter intuitive but by slowing you down you consider the composition more carefully. As a result, you tend to take fewer but higher quality images. This also makes it easier to sort and grade your images later. I can recall times where I've worked handheld rather than use a tripod and I might end up with 3-5 times as many images. Unfortunately, most of these would be very poor and I would end up deleting them.
6. A tripod will improve your composition in other ways as well as making you think about it more. For example, it allows you to check that the camera is level before you take the shot. You can also take your time to check around the edges of the frame to ensure there aren't any unwanted distractions. Simple mistakes like this can easily ruin a good shot but using a tripod allows you time to check and correct problems.

Having said so much about how important a good tripod is, how do we recognise good quality? Let's look at some of the details of what makes a tripod good for landscape photography work.

Tripod Features for Landscape Photography

When you come to buy a tripod for landscape photography, quality matters. You also need the tripod to have a few features that you might not immediately think about. If you don't have a lot of experience in this area, it's easy to become confused and make costly mistakes. When I first became interested in landscape photography, I remember wasting a lot of money on cheap tripods. Usually, they would quickly break or be so difficult to work with that they were literally useless. This put me off trying to use a tripod for a while until I invested in a quality one.

A good tripod should make landscape photography easier by providing you with a stable support which is easy to adjust. This translates directly into more enjoyable photography as well as allowing you

to produce better images. To help you make better purchasing decisions I've outlined the important features to consider below.

Something that's often overlooked by photographers looking for their first tripod is that you're really buying two separate things. The tripod legs and the tripod head. Although some manufacturers sell both together as a package, most of the time you should be buying the two separately. This allows you to select the legs and head that best meet your needs. You should avoid (or at least be wary of) tripod legs which have a fixed head. This is usually an indicator of poor quality.

When you come to attach the tripod head to the legs, it should use a central mounting screw. This will be on a small base at the top of the legs. The screw comes in two standard sizes which most tripod heads can attach to. These are 3/8" and 1/4" so do check this when buying the tripod legs. Cheaper tripod legs may not follow these standards.

Something else that can cause confusion is that the tripod legs may not have the correctly sized screw for the tripod head. Some tripod legs feature a reversible screw you can be remove. By turning this upside down you can present the other screw size for attaching the tripod head. Another commonly seen solution is a screw on sleeve. This screws onto the existing mounting screw in the tripod legs or inside the tripod head.

Screw adapters to change the thread size of a tripod

The tripod legs usually feature sections of tube which slide into each other. There is then a locking mechanism on each tube section. This allows you to adjust the height of each leg independently and so level-

ling the tripod on uneven ground. Two commonly used locking mechanism are the clip and the twist lock.

Two examples of tripod leg locking mechanisms

I personally have tripods using both mechanisms and for a long time was happy with either. Today I favour the older clip design. My reason for this is that sometimes you might need to alter the legs of your tripod by very small amount to level up the base. I find this much easier to do when using the clip design because you can open the clip and slide the leg just a little before locking again. It's still possible to do this with the twist lock design but I don't find it quite so easy. This is especially true if the twist lock is sticking because of dust or the weather. I sometimes need to lift the legs in order to get a strong enough grip. Then when I put the legs down again, I can't get them in the same position and the tripod still isn't level.

It's worth trying out both types of leg section lock to see if you have a preference. Try to find a camera shop with a selection of tripods or ask a friend. If you try these out indoors (probably in a shop), try setting the tripod on an uneven surface like stairs.

Let's now consider the number of sections in the tripod legs. This is usually somewhere between 3 and 5 but you may find tripods with

fewer or more sections than this. In the following image you can see a 5 section compact tripod next to a standard 3 section tripod which is only partially extended.

Tripod leg sections

The more sections the tripod legs have, the smaller the tripod is when collapsed. This can be beneficial if you want to travel with the tripod. It allows it to collapse down smaller for packing into a case. The downside to having more leg sections is that it can make the tripod less stable. When you're searching and testing for a new tripod, stability is something to check carefully.

How high the tripod extends is important and is affected by the number of leg sections and their length. You may not find a short tripod an issue at first but over time you'll encounter lots of situations where a tripod is difficult to work with. Short tripods often increase their size by adding an extending centre column. Don't let this fool you and ignore any centre column extension. Extending a centre column can cause the camera mount to become less stable and more

prone to picking up vibrations. Think of the centre column as having a little extra height in reserve should you need it.

As well as causing stability problems, the centre column can get in the way when you want to position the tripod close to the ground. Check if there is a way to remove or move the centre column out of the way. On some tripods you can unscrew the centre column whilst some have a complex mechanism to reposition the column horizontally. Check that there is a way to do this and that you're happy using it.

Tripod with centre column mounted horizontally

Being able to position your tripod close to the ground is an important feature to check for. Well-designed tripod legs will allow for this. Usually they have some form of locking that allows you to position the legs at a shallower angle than usual. This then allows you to lower the height of the tripod below what you can achieve by collapsing all the leg sections. Do check any tripod you're buying has this capability. You will find it invaluable at some point.

Tripod legs spread to position the camera nearer to the ground

Another aspect of tripod use is to be able to get the legs level. This then provides a level base for the tripod head to sit on. An important feature to look for is a spirit level positioned somewhere at the top of the legs (where all the legs meet). You can then use this to level the legs separately to the tripod head which you can't do using a spirit level on the head (unless it's part of the tripod heads base).

You need to be able to level the tripod legs for a level platform before you level the tripod head and camera. This is particularly important if you are panning the tripod head for any reason, like shooting a panoramic series for stitching. If the legs aren't level, as you rotate the camera on the tripod it doesn't stay level. If you don't notice this, you could find you ruin an otherwise great image.

Spirit level on the tripod legs to ensure they are level

The weight of your tripod (head and legs together) is important for two conflicting reasons. On one hand the weight adds to the stability of the tripod. If the tripod is too light, it's easy for it to move and vibrate in the wind or even pick up vibrations in the ground. But the downside is that you must carry the tripod and if it's heavy, that's not going to be pleasant. If you do a lot of walking, a heavy tripod can be very tiring and if you're tired, you won't be shooting your best photography.

Some tripods feature a hook at the bottom of the centre column. You can then hang your camera bag on the hook below the tripod adding weight and stability. This can be very helpful but be careful in windy conditions. Strong winds can cause your bag to blow around and cause camera shake. Although more expensive, I have found a high-quality carbon fibre tripod strikes a good balance between weight and

stability. They tend to be lighter but remain ridged and stable. They also usually have a good maximum load rating.

The maximum load rating of the tripod is another important consideration. This is the maximum weight the tripod will accept and remain stable. Be sure the combination of your tripod head, camera, lens and any filters are well within the rating of the legs. I usually look for a minimum rating of 5kg but even then, be careful. I have seen tripods with this rating that would struggle to support just a couple of kilos. It's always wise to check the stability of any tripod with a camera in place if you can. If the legs are wobbly when you put your hands on the camera to operate it, leave the tripod well alone. Also don't forget the tripod head will have a maximum weight rating. This is particularly important if you opt for a ball head which we will discuss shortly.

Something you may not have given much thought to is carrying your tripod. We've already covered the combined weight of the tripod (head and legs) but there's something else to keep in mind which is the cold. In winter or cold conditions, carrying a metal tripod for any length of time can become difficult and even unpleasant. If you carry the tripod by one of its legs, your hands can become very cold very quickly, even if you're wearing gloves. An easy solution it to find a tripod with a foam grip around the top of one or more of the legs. Holding the foam grip helps protect your hand from the cold and makes it much easier to grip the tripod legs if you're wearing gloves.

When it comes to the tripod head there are lots of designs and which is best for you will have a lot to do with personal preference. Despite this, there are important points to consider:

Some tripod heads are intended for video work rather than photography. You may find these have a reduced range of movement when compared to a photographic tripod head. This can make getting the camera into some positions difficult or even impossible. You can quickly distinguish a video head from a photographic head because the video head has a single long arm. This is panning arm for slowly

Would you like to continue?