

Landscape Photography



A guide to better landscape photos

by Kim Rormark

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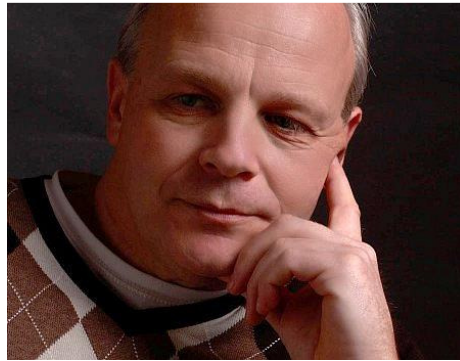
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About the author

Kim Rormark is a landscape photographer based in Norway. He has been photographing for more than 30 years. He has experience from studio and portrait photography, but his passion is landscape and travel photography. For the last decade, his day job has brought him to more than 60 countries all over the world. In this job in the medical field, teaching customers worldwide has been an important part. Now he writes and teaches photography on www.landscape2art.com , a site all about landscape photography.



Introduction

What is landscape photography?

Landscape is one of the most popular genres in photography and maybe the most difficult to master. Why is that? It might seem straightforward to photograph landscapes. You just point your camera at a beautiful sunset - and boom! Those who have tried are often disappointed because the beautiful sunset turned out to be almost entirely black and the nice colors just a smear of orange. Not at all what you expected and how the photos from professional photographers look.

In all types of photography, there is much more in it than pointing your camera at a beautiful scene and push the shutter button. It does not even help if you upgrade to a brand new DSLR (Digital Single Lens Reflex) camera.

On the other hand, one of the advantages of landscape photography compared to many other genres of photography is you don't need a lot of (expensive) equipment to create great photos. You can make beautiful landscape photos with almost any camera when you know how to do it right.

Challenges in landscape photography

In landscape photography, you face some significant limitations compared to let's say a portrait photographer. As a landscape photographer, you cannot move your subject into a better position. A landscape is static, so you have to find the best way to photograph it. In landscape photography, you cannot change or add more light. At best you can wait for the light to change. Because of these limitations planning is important.

Beautiful landscapes are easily accessible and available to everyone. This does not mean it is easy to make good landscape photos. You can take snapshots everywhere you go, but these shots are typical "I was there" photos. A good landscape photo tells a story and should convey the feelings of the photographer at the time he took the photo. No camera can do this. Only you can, by using your creativity and by learning composition techniques.

Four basics you must learn to improve your landscape photography

1. How to get the exposure right in all light situations. This is about knowing how to make photos that are not too bright or too dark – consistently.
2. How to get your images in sharp focus every time. A blurry photo is no good.
3. How to create a balanced and pleasing composition people will love and give you compliments for.
4. How to create your own landscape photography style.

The first two points are technical and about how your camera works and how to choose the right settings to get the results you want. It is a common misconception the more expensive and “good” camera you use the better photos you take. The brutal truth is unless you know how to use your camera not even the most expensive camera will get you any good pictures.

It is all about the photographer and the photographer's ideas. The camera is only the tool you use to get the image taken. Understanding the basics in point one and two is essential, but something everyone can learn relatively easy.

The third point is much harder to learn. A good composition is what makes the difference between a mediocre and great landscape photo. Beginner photographers often don't even know about composition in photography. Learning about how the eyes and our brain read a photo is important.

The fourth and last point is something no one else can “teach” you. Creating your style develops over time and can take years. When a photographer has developed his style, you can immediately tell who the photographer is when you see one of his photos.



Image above: Lemaire Channel, Antarctica

PART ONE

Equipment

Which camera for landscape photography?

With so many options available on the market it can be tough to decide which camera to buy. It used to be a choice between the two common DSLR brands Nikon and Canon. It is not like that anymore. Whatever decision you make it must be based on your personal requirements.

If you buy a new camera only because someone recommended it, you might end up disappointed. Some photographers are more concerned about pixels and sensor noise. Others are more practical and choose equipment that does the job and nothing more. If you ask me what camera you should buy, my answer is “it depends”. Not a good answer, I know.

It is impossible to recommend photography gear without knowing how you are going to use it. What is best for one photographer is not necessarily the best for another. A camera for landscape photography does not need to be packed with fancy features.

If you never or rarely photograph in low light conditions you don't need to be concerned about sensor noise. Almost any camera today, even the iPhone does well in good light conditions. For landscape photography, you don't need a camera capable of capturing many frames per second. High framerate is a useful feature in sport and wildlife photography.

To give you some ideas what to look for if you plan to buy a new camera, I will explain the most important key feature of a camera and how these features can be useful for you.

Megapixels (MP)

Highest possible Megapixel is no longer the most important feature in a camera. Any camera with 16 megapixels (MP) or more is good enough for landscape photography. Hardly any camera sold today has less than 16 megapixels. With a 16 MP camera you can make an A2 print with good quality. A2 size is about the biggest size you are likely to print unless you are a professional photographer.

A big number of digital photos taken every day never leave the photographer's computer. Despite this a huge number of photos are uploaded and shared every day on Internet and social media sites. Only a small fraction of all photos will ever be printed. The number of

megapixels is not important at all for photos to be seen on a computer screen. For this purpose all cameras are good enough, even your smartphone.

Advantages of high megapixel cameras

- If you plan to make a lot of big prints, the more pixels the better. But really, how often do you make prints of huge size?
- With more pixels you capture more details allowing you to crop out portions of your photos when you do post processing.

Disadvantages with high megapixel cameras

- A lot of megapixels create big files that require a lot of memory card space. Memory cards are less expensive now, so this is not too much of an issue.
- Big files take longer time to download from the memory card to the computer. You will need a lot of backup storage.
- Big files need a powerful computer when post processing.
- More megapixels require better and more expensive lenses to get the full advantage out of all the megapixels.



Image below: Bruarfoss, Iceland (f22, 1s)

Physical size of the image sensor

APS-C and Full frame

The size of the image sensor is more important than the megapixel count. The most common sensors are APS-C (crop sensor) and Full Frame (FF) sensors. These two sensor types are most common in DSLR and Mirrorless cameras. APS-C and FF sensors are the biggest sensors used in consumer and prosumer cameras. These sensors are also the most common in professional cameras.

Micro four thirds

Micro four third image sensors have become increasingly popular the last few years. Micro four third sensors are smaller than APS-C and full frame. Technology has improved a lot, so a Micro Four Third sensor produces image quality equal to APS-C sensors. The advantage of the smaller sensor is the size of the camera is smaller, and it weighs less.

Small Point and Shoot and Smartphone sensors

Image sensors used in small compact and phone cameras are significantly smaller compared to all the sensors mentioned above. It is in low light conditions you will struggle with the image quality with a Point and Shoot and a smartphone camera.

The sensor size influence on focus

In general, the bigger the sensor is, the less noise in the image file. Noise from digital image sensors is the equivalent to film grain in analog cameras. Sensor noise is only a problem in low light conditions. If you do a lot of night photography, you will do better with a camera with any of the bigger image sensors.

The Depth of Field (also called Depth of Focus) is slightly shallower with a full frame sensor compared to any of the smaller sensors. In landscape photography where in most cases we want the image sharp all the way from foreground to background, this can be a challenge.

Some photographers get a surprise when they upgrade from a Smartphone or Point and Shoot camera to a DSLR. They experience some of their images are no longer in focus throughout the frame. The reason for this is the difference in Depth of Field created in a camera with a small sensor vs. a bigger sensor camera.

The smaller the sensor is, the larger the Depth of Field is. With a Smartphone with its tiny sensor, it is easy to get everything from foreground to background in focus. On the other side, you will struggle more to create a shallow Depth of Field with a Smartphone if that is what you want.

Pixel size

An image sensor holds a given amount of (mega)pixels on its surface. A pixel is designed to capture light. The bigger the pixel is, the better it captures light. The more pixels on a small sensor, the smaller the pixel needs to be. 16 MP in a Point and Shoot camera is not equal to 16 MP in a Full frame camera. To fit the same amount of pixels on the smaller Point and Shoot sensor, the pixels need to be much smaller in size. The difference in image quality will be significant in low light situations. Smartphones have even smaller pixel size and will produce a lot more noise in low light situations.

Dynamic range

A sensor's dynamic range is its ability to capture very bright areas and very dark areas of a scene in the same image. A typical example is when you photograph with the sun in your composition. Either the sun will be way too bright with the land properly exposed or the sun will be exposed correct, and the land will become completely dark.

High dynamic range situations are some of the biggest challenges for landscape photographers. In general cameras with the biggest sensors have wider dynamic range and will handle these situations best. In extreme cases however, it is not possible to capture the whole dynamic range in a scene with any camera. In such conditions different HDR (High dynamic range) techniques are used.

ISO sensitivity and image quality

ISO is an international standard on how sensitive a camera sensor is to light. In situations with limited light, you can increase the ISO to make the sensor more sensitive to light. The disadvantage is increasing the ISO introduces sensor noise which is reflected in your images. Cameras with the smallest sensors typically cannot go higher than ISO 800 and still retain good image quality. More expensive cameras can do well up to ISO 3200-6400 and above.



Image above: Lofoten, Norway (f4, 20s)

Advantages of a high ISO capable camera

The higher ISO you can set on your camera and maintain image quality, the less light you need. Being able to increase the ISO is useful when doing night photography

Disadvantages with a high ISO capable camera

Some manufacturers promise more than they can deliver. Bad ISO performance does no good for your images. As a general rule, the ISO should be set to the lowest possible your camera allows and increased only if it is necessary to get the picture.

Which lens for landscape photography - what to consider?

The most common lenses used in landscape photography are wide angle lenses. If you spend time on photo sites on the Internet, you will find the majority of landscape images have the typical wide angle look. These pictures have a foreground appearing big in the frame, a middle ground, and a background. It does not mean you cannot use a telephoto lens for landscape photography. You should use a telephoto lens as it is a different challenge from using a wide angle. The technique is different.

If you have recently started out in landscape photography, you probably have the kit lens that came with your camera. The most significant limitation with kit lenses is they typically don't go very wide. Unless you photograph a lot at night you do not need the most light sensitive lenses available. You can always put your camera on a tripod if the light conditions get dim. As you learn more about photography, you will experience by yourself if and when you need a "better" lens.

Prime or zoom lens

You have to decide if you want a prime or a zoom lens. If you only consider image quality prime lenses tend to give you more value for money over zoom lenses. In general, prime lenses have a wider maximum aperture opening making them better in low light. Primes are sharper compared to similar focal length zoom lenses. A prime lens has a fixed focal length meaning you have to move if you want the subject to fill more of the frame. Prime lenses have fewer lens elements inside making them smaller and lighter compared to zoom lenses. In landscape photography, the subject is often complex and you need to do small adjustments in your composition to get it right. Because of the flexibility most landscape photographers today use zoom lenses.

Focal length

We can divide lenses into three main focal lengths: Wide angle, normal and telephoto lenses

Wide angle

Wide angle lenses are grouped into wide angle and super wide angle. The effective focal length is dependent on the camera sensor size. The focal lengths of super wide angle lenses for the most common sensors are in the range of:

- 14-35mm with a Full frame sensor
- 10-20mm with an APS-C sensor
- 7-14mm with a Micro Four Thirds sensor

The best super wide angle lenses are quite expensive. A regular wide angle lens with shorter focal length is fine for most landscape photography. If you plan to shoot the night sky a lot you should preferably go for a light sensitive super wide angle lens. It does not seem to be a lot but the extra 2 mm from a 16mm to a 14 mm focal length makes a big difference, much more than you think.

The main advantage of a wide angle lens in landscape photography is this lens exaggerates depth and relative size in the image. The wide angle lens distorts and changes the reality of the scene. A second advantage is you get a larger Depth of Field with a wide angle lens. In landscape photography it is important to get everything in focus from the nearest foreground and all the way to the background. This is much easier to do with a wide angle lens compared to a telephoto lens.

Normal lenses

Using a normal focal length lens for landscape photography is not common. The term normal lens refers to the fact this lens has an angle of view close to how our eyes see. Most kit lenses cover the normal range.

Telephoto lenses

Telephoto lenses are less common than wide angle lenses in landscape photography. A telephoto lens has a much smaller Depth of Field, so this lens is more challenging to use unless you shoot subjects in the far distance. A telephoto lens compresses the scene and is a good choice when photographing mountains.

Typical focal lengths of telephoto lenses for landscape photography are in the range off:

- 70-200mm with a Full frame sensor
- 50-140mm with a APS-C sensor
- 40-150mm with a Micro Four Third sensor

Get yourself a tripod

The tripod is probably the most underrated tool by beginner landscape photographers and the most loved by professionals. There is a reason why. Unless you understand how you can use aperture and shutter creatively, you probably don't see the need for a tripod. The fact is most landscape images are shot with the camera on a tripod. Some of the creative photographic effects are not possible to do without the tripod. So get yourself one decent tripod as soon you can. The tripod will open your eyes to new photo opportunities, trust me.

PART TWO

Basic camera settings

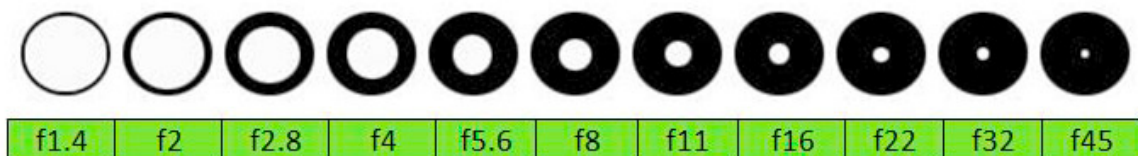
Aperture

Aperture is the opening you can see if you look through a lens. Think of aperture as the pupil in your eye. The pupil is small in strong light but opens up as the light gets less. Similar to the pupil the aperture opening can be adjusted to allow more or less light to enter the camera. It is obvious the bigger the opening is, the more light hits the camera sensor.

Aperture is measured in f-stops. It is somehow confusing as the lower the f-number is, the bigger the opening is. As already mentioned the aperture is important for the Depth of Field. The Depth of Field is how much of the image is in focus in front of and behind the selected focus point. The smaller the opening is (bigger f-number) the more Depth of Field. At f22 more of your picture will be in focus compared to f4 at the same focus distance.

In landscape photography where you in most situations want as much as possible of the scene in focus, aperture is an important setting to understand. If the light condition allows the aperture is often set in the range of f11-f16 for maximum Depth of Field. The opposite is the case in portrait photography. When photographing a portrait it is often desired to blur the background while keeping the person in sharp focus. To achieve this, a wide aperture is used (low f-number).

The aperture scale typically looks like in the figure below. The f-stop range differs from lens to lens. Between each of the numbers shown here, it is one f-stop difference. On digital cameras, it is common to use the one-half-stop scale or the one-third-stop scale for more accurate adjustments. From a learning perspective, I will keep it simple and use only one-stop scales here.



For example, if you change your aperture from f8 to f11 you will need the double amount of light to keep the same exposure. Similar if you change from f8 to f5.6 you will need half the amount of light to keep the same exposure.

Shutter speed

While the aperture sits inside the lens, the shutter is a mechanism inside the camera. You can think of the shutter as a curtain you can close and open. The shutter is either fully closed or fully open. When the shutter is closed, no light hits the camera sensor. When it is open light enter through the lens and expose the sensor - a picture is made. The way the shutter controls how much light is hitting the sensor is by adjusting for how long time it is open.

Shutter speed is measured in fractions of a second. A shutter speed of 1/125s means one one-hundred-and-twenty-fifth of a second. This is a very short time. As a comparison the blink of an eye takes about 1/3s. However in photography terms 1/125s is a relatively “long” time. Some cameras are capable of incredible short shutter speeds as fast as 1/8000s. Shutter speeds longer than a second is measured as whole seconds. By adjusting the shutter speed you can blur or freeze movement.

1/8000s	1/4000s	1/2000s	1/1000s							
1/500s	1/250s	1/125s	1/60s	1/30s						
1/15s	1/8s	1/4s	1/2s	1s	2s	4s	8s	15s	30s	B

As with aperture the difference between each number in the table above is one f-stop. If you increase the shutter speed from 1/125s to 1/250s you will need to double the amount of light to get the same exposure. The same if you decrease the shutter speed from 1/125s to 1/60s you will need half the amount of light for the same exposure value.

The longest shutter speed you can set on most cameras is 30 seconds. But it doesn't stop there. There is another setting named B (bulb). With this setting, you can open the shutter for as long as you want. If you need longer shutter speeds for creative effects or in extreme low light conditions like night photography, you will have to use Bulb mode. You will need a cable release or remote shutter control in Bulb mode and the camera on a tripod

Wrong use of shutter speed is one of the reasons if your photos are blurry. The blur caused by choosing a wrong shutter speed is called motion blur. Motion blur appears when the camera, the subject or both are moving during exposure.

How long shutter speed to use depends on several factors such as the light conditions, the focal length, if the subject moves or not and how steady your camera is during the exposure.

Creative use of shutter speed

One last important factor is the creative use of shutter speed. In some situations, you purposely want the subject to move. Waterfalls with the white cotton looking water are examples of using long shutter speed. Unless you intentionally want to create an illusion of movement, you should use as short shutter speed as the light conditions allow.

In landscape photography more than in most other genres of photography, the subject is not moving much. Because of the static subject movement is not so much of an issue. Camera movement however is the most critical factor. This is why you will see most serious landscape photographers always using a tripod.

ISO

With the ISO you can adjust how sensitive your camera sensor is to light. The more you increase the ISO the less light you need to get a proper exposure. Every digital camera has a base ISO. It is possible to increase the ISO electronically from its base level.

The drawback with increased ISO is the introduction of sensor noise (grain). How much noise varies from camera to camera. It is in low light situations you will need to increase the ISO. But some noise is better than not getting the picture at all.

50	100	200	400	800	1600	3200	6400	12800
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In the scale above it is one f-stop between each value. If you increase the ISO from 100 to 200, you only need half the amount of light to keep the same exposure. On most digital cameras the ISO is in the range of 50 to 6400. To ensure the best possible image quality you want to keep the ISO on the lowest possible setting in most situations.

Exposure

Exposure is often the most challenging part for many beginner photographers. It is fundamental to understand how you get a proper exposure (not too light or too dark photo). When you learn how aperture, shutter and ISO work together, you have come a long way in getting better photos. You also need to know how the camera light meter works. The light meter can be tricked in some situations. In these situations you must overrule what the camera has decided. Most cameras have an Exposure compensation setting for this purpose.

Exposure Value (EV)

Exposure value is a way to express the combination of aperture and shutter speed. A camera setting with an aperture of f16 and a shutter speed of 1/125s represents a given Exposure Value (EV). ISO is not a part of the EV equation. Other combinations of aperture and shutter speed will give the same EV. An aperture of f11 and a shutter speed of 1/250s will result in the same EV as an aperture of f22 and a shutter speed of 1/60s.

“Correct” Exposure Value (EV)

What is a “correct EV”? It is to some extent subjective and depending on the scene. Some photographers like the photos to have a slightly dark feel to them while others like the photos brighter. That’s totally OK and is the artistic freedom of the photographer. But most of us like the photos to look as similar as possible to what we saw.

You have most likely experienced both too bright and too dark images unintended. The reason for this “bad” exposure is aperture or shutter is set to wrong values according to the light conditions. Your camera did a wrong measurement because you allowed it to or you chose the wrong settings yourself.

“Creative Correct” Exposure Value (EV)

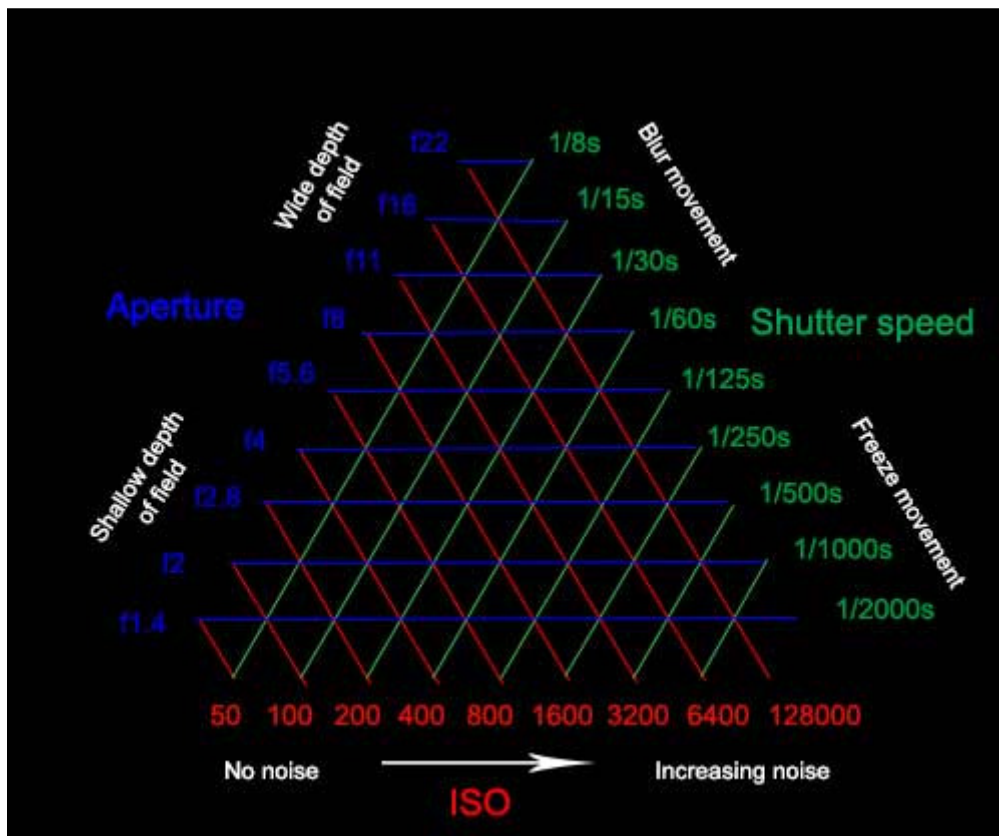
The “creative correct EV” is when you take control of the camera because you have decided to create a particular effect in your photo. One example is when you freeze motion. You can “freeze” the water in a waterfall so you can actually zoom in to the photo and look at the individual water drops. Another creative effect is the opposite when you blur water and make it silky white. You will not be able to create these effects unless you take your camera out of Auto mode and make the settings manually. Why? Because the camera doesn’t know how you want the photo to look like.

Exposure triangle

You have now learned about exposure and what aperture, shutter speed and ISO is. Now let us see how these three settings links together. A common way to look upon this is by using the exposure triangle

What the exposure triangle shows us is there is a relation between the settings. If you increase one of the parameters with 1-stop, you have to decrease one of the other two with 1-stop to get the same exposure.

In most situations it is the aperture and shutter speed settings you will change. Changing aperture and shutter speed will have an impact on how your images look. ISO is a setting you do not change unless the light is limited. You should keep the ISO at the base level.



It is the lens on your camera that dictate how light sensitive your system is. It is a significant difference between a lens with f2.8 and f5.6 as the widest aperture. It is two full stops between these two lenses.

Let us look at two examples with two different lenses. In this example you want to freeze the movement of a waterfall. To do this, you need a shutter speed of 1/1000s. The light is dim,

so you need to increase the ISO to 400. Most cameras will have no problem with an ISO of 400 and still maintain good image quality with no noise

With the most light-sensitive lens, you find an aperture of f2.8 will give the correct exposure for this scene.

With the other not so light-sensitive lens you can see, there is no way you can keep a shutter speed of 1/1000s to get the same exposure. There is no f2.8 on this lens. The best you can do with this lens is a shutter speed of 1/250s. But 1/250s is not fast enough to freeze the water. What do you do?

f2.8	f4	f5.6	f11	f16	f22	
1/1000s	1/500s	1/250s	1/125s	1/60s	1/30s	1/15s
ISO 400						

N/A	N/A	f5.6	f11	f16	f22	
1/1000s	1/500s	1/250s	1/125s	1/60s	1/30s	1/15s
ISO 400						

N/A	N/A	f5.6	f11	f16	f22	f32		
		1/1000s	1/500s	1/250s	1/125s	1/60s	1/30s	1/15s
		ISO 1600						

The two things you can do are to add more light or increase the ISO. The first is obviously not an option in landscape photography. So you have to increase the ISO. By increasing the ISO two stops - from 400 to 1600, you can keep the shutter speed at 1/1000s with an aperture of f5.6. At ISO 1600 there is always a risk you will see noise in your images if you use a Point and Shoot camera with a small sensor.

Camera exposure modes

Auto mode

This mode is like photographing with a Point and Shoot camera or a Smartphone. The camera selects aperture, shutter speed and ISO to suit the light condition. You have no control.

Program mode (P)

P mode is similar to the Auto mode above. The camera selects the aperture and shutter speed based on the scene and light conditions. On most cameras you can manually override the selected aperture and shutter speed. The overall exposure will remain the same.

Semi-Automatic modes

I like to think of these modes as Semi Manual because that is what they are. They are creative modes which you select based on how you want the photo to look. With semi-manual settings, you are in control of the camera. You set one parameter (aperture or shutter speed) and the camera sets the other parameter for a proper exposure.



Aperture priority A (Nikon and most other cameras) or Av (Canon)

"A" is the most common used semi-automatic mode in landscape photography. As you have already learned the aperture controls the Depth of Field in the image. In landscape photography being able to select a small enough aperture is essential. When you have set the preferred aperture, the light meter measures the light and chooses the correct shutter speed automatically.

Shutter priority S (Nikon and most other cameras) or Tv (Canon)

Shutter priority works the same way as aperture priority, but you select the desired shutter speed. The shutter control movement so if you want to freeze movement you select a fast shutter speed. If you want to blur moving water, you select a long shutter speed. When you have selected the shutter speed, the camera measures the light and set the correct aperture for the scene.

Manual mode (M)

In (full) manual mode you have the complete control. You set both aperture and shutter speed manually based on the light meter reading. Manual mode is useful in tricky light conditions like when photographing at night. If you let the camera decide the exposure when photographing the moon, you will get a completely blown out moon.

Other times full manual mode is useful is when you want a consistent exposure. One example is if you wish to shoot a series of images for a panorama. If you let the camera decide you might see slight variations in the exposure between each photo. This inconsistency will make it difficult to stitch the photos in your imaging software.

Scene modes (or icon modes)

Most consumer level DSLR and Point of Shoot cameras have a set of scene modes.

Portrait

The camera selects a wide aperture opening to ensure a blurred background (out of focus). Some cameras recognize humans and will focus on the face.

Landscape

The camera selects a small aperture to ensure a maximum Depth of Field. The camera enhances colors and contrast for best possible landscapes. The camera focuses on infinity.

Macro

The camera zooms the lens to the focal length it has the closest focusing capabilities. A small aperture is selected for maximum Depth of Field.

Sport

The camera selects a short shutter speed to freeze movements. Often the ISO is increased to keep the shutter speed fast.

Night landscape

The camera selects a long shutter speed because of the low light condition. The shutter speed is often in the 1-2 second range so you must use a tripod. The camera turns on noise reduction and turns the flash off.

There are many other scene modes available. Scene modes vary from camera to camera. Other modes might be Fireworks, Snow, Beach, Sun and Stars. For a full overview of what your camera does with the different scene modes, you must read the instruction manual. Scene modes are most common on Point and Shoot cameras and entry consumer DSLR and Mirrorless cameras.

You have no control over your camera in these modes. I never use scene modes on any of my cameras. I strongly recommend you to learn the Semi-automatic and the Manual modes as they give you full control over the result.

Blurry images

After exposure, the other challenge beginner landscape photographers struggle with is to take sharp images.

The most common reasons for blurry images are:

- Motion blur - the subject is moving, and you have not selected a proper shutter speed
- Camera motion - the camera moves during exposure. You handheld the camera and use a too long shutter speed. Use a shorter shutter speed or use a tripod.
- Wrong focus point - you have chosen the wrong focus setting or the camera cannot lock the focus because of difficult light conditions. It is important to learn how to focus manually in such situations.
- Too shallow Depth of Field - adjust to a smaller aperture

PART THREE

Timing

Is there a best time for landscape photography?

The simple answer is - not really. The best landscape photographers are capable of making great photos any time they go out to shoot. However, the majority of pro photographers shoot at dusk and dawn simply because of the beautiful warm colored light at these times. Right timing is one of the reasons their images often look so good.

Considering this, you have to know the exact time of the day the sun rise and sets. The time of year is also an important factor you must have in mind when planning.

In the northern hemisphere where I live, we don't see the sun at all for a few weeks during winter. Not seeing the sun does not mean we cannot photograph. Even without the sun, it is not completely dark in the middle of the day. We have a characteristic blue light this time of the year.

During a few summer weeks we cannot photograph typical sunrise and sunset because the sun actually never sets. This is the midnight sun. At midnight, the sun just touches the horizon before it rises into the sky again, and a new day have started.

If you limit yourself to shoot only at dusk and dawn, you have only 2-3 hours every day you can photograph. That is a limitation you don't want, right?



Image above: Reine in Lofoten, Norway (f5, 30s)

Right place at the wrong time

What if the weather and light conditions are not perfect? We have all seen landscape photos from beautiful locations all over the world. Visiting most of these exotic places are not realistic for the majority of us.

Maybe you have traveled to your dream destination on a once in a lifetime trip. Then, at the time you have reached your dream destination, the weather and light conditions are far from what you have planned. Such a pity, a lot of money spent and this weather.

As a landscape photographer such a scenario is the reality. It is nothing special with this and it happens to the professional photographers as well. So what do they do? Most of them go back again another time and hope for better conditions. There is always a risk even with the best planned trip the light condition is not what you expected.

Some years ago I visited the Greek island Santorini which is known for its beautiful sunsets. Two hours before sunset we sat down at one of the best located restaurants for sunsets. The view was fabulous, the food and wine expensive and the sunset was over in less than five minutes. Everything was set up and I was prepared to shoot. It was not the short time for the

sun to set that was the problem. That evening the sunset was just nothing. The light was faint and there was haze on the horizon. Not exactly what I have planned.

Don't underestimate your own backyard

There are a lot of opportunities near where you live; you just have to explore them. The advantage of shooting near home is you will be much more flexible with time. You can plan to visit a spot one day and if the light is crap you can go back the next day hopefully with better conditions.

Not all of us are so lucky we can see and photograph the Aurora Borealis many times every season. Not all of us live near the sea where we can shoot sunsets and great seascapes. If you don't live near such a place you can find your own local spots. You will be surprised how you can make beautiful photos near where you live.

There is a saying "the grass is always greener on the other side of the fence". As photographers we dream about travelling to far away locations because we believe we will make better images there. Your chance of getting the stunner shot is higher at a local spot because of the time factor. You can visit at the right time on short notice.

Go back again and again

Every location will vary throughout the day and from season to season. Also, the weather and light will change a lot. All these elements will give you endless possibilities for different photos even the location is the same. It is not only because of the light you should go back several times. You can also look for and try to create new more interesting compositions.

I have my favorite spot near where I live, and I go back there as often I can. I come back to this place many times every year. I try to photograph all the four seasons we have up here.



Image above: Tyrifjorden lake, Norway in winter (f10, 1/5s)



Image above: Tyrifjorden lake, Norway in autumn (f11, 1/60s)

After a storm or heavy rain

This might not sound like the best time for landscape photography. After a storm when the clouds start to break up there is a good chance arrays of sun will shine through the clouds. When this happens you have the scene set for some spectacular photography. Most people will not think of these rather cloudy and dark conditions to be suitable for photography. Believe it or not but when you learn to see the light you will understand. Even if you don't see the sun there is light coming through. Cameras are great of capturing this light which you might not recognize with your bare eyes.

Days with fog and mist

This is another condition where most of us don't think about going out photographing. If you are high up above the fog you can get interesting photos where the landscape or trees stick up through the fog. If you are under the fog you can expect the sun to break through anytime, so be patient and wait.



Image below: Nes in Akershus, Norway (f9.5, 1/350s)

PART FOUR

Light

Light in landscape photography

You have probably wondered why your images sometimes look flat and boring compared to the work of experienced landscape photographers. The most important answer is light. The best images made by pros are always shot in perfect light conditions. As you cannot change the light in landscape photography, you need to make sure you are at the scene at the right time. There are many types of light which each have different impact on your photos. Learning the many aspects of light is essential in photography.

Natural light

As a landscape photographer you have to use available natural light. You cannot change the light but you can wait for the light to change. Waiting is a key for any landscape photographer - you need to be patient. The good thing is the light can change very fast. A dull scene with clouds on the sky can become spectacular as the sun breaks through. This can happen within minutes. On the negative side the perfect light will not last so you need to work fast to get the shot you want.

Dusk and dawn

The time around sunrise and sunset is considered being the best times to photograph landscapes. At these times the light has a nice warm color and long shadows which brings drama into the image. Light and shadows are powerful tools when composing photos. Light illuminates and shadows define and create depth.

With flat mid-day light you will not be able to create this three dimensional feel of your images. Photographing sunrises requires you to get up from bed early often in the middle of the night. The same if you like to shoot night landscapes, you need to be a night owl and not being afraid of the dark.

You should always try to be at the scene an hour before sunrise and sunset. A typical mistake beginners do is to leave as soon the sun has set. Spectacular light might appear minutes after the sunset as well so be prepared. You can miss great opportunities.

The blue hour

At twilight during dawn in the morning and dusk in the evening the light has a typical dark blue color. This is the “Blue Hour”, another great time to photograph landscapes. This blue light is not always easy to see with your eyes but the camera will capture the blue color.

Planning is the key

A landscape photographer needs to plan. Ideally you should do research so you know when the light is best at a particular location. If you plan to shoot a sunset, you have to know in which direction and at what time the sun is setting.

Some locations are better for sunsets and others are better for sunrises. A mountain can obstruct the view to the east where the sun rise and make this location not so good for shooting sunrises. The same spot might be a fantastic place for sunsets.

If you cannot visit the location before the shoot you can use one of the many tools available on the Internet. Other options are apps you can use on your Smartphone. One of my favorites is the iPhone app PhotoPills (www.photopills.com). This app does about anything you need in photography and is an absolute must have for landscape photographers.

PART FIVE

Composition

Why is composition so important in landscape photography?

Composition is about different elements in the photo and how they relate to each other. It is how good the composition is that makes a photo interesting or not. Composition can be simple or complex. Composition can be relaxed or tens. Like in music there are different moods and styles. What you like is totally up to you.

Learning how the different composition techniques impacts on an image is essential knowledge. There are many composition rules in photography. You should look at these as guides and not absolute rules. Because of this, it is more challenging to learn how to make great compositions

Here are a few of the most important composition techniques.

Perspective

Your camera is only capable of capturing a two-dimensional image. Therefore you have to use different techniques to convey three-dimensional effect in your photos. Using perspective in photography is important because it creates an illusion of a three-dimensional scene. Perspective makes an object look further away or closer relative to other elements in you scene. There are several types of perspective, and I will discuss all of them here. Some of them are more relevant to landscape photography than others, but they are all worth knowing.

Linear perspective and converging lines

This is probably the most frequent use of perspective in photography. If you see a photo of a road that moves into distance, it seems the road is getting narrower the further away it goes. When converging lines recede into the horizon our eyes and brain interpret this as distance.

Overlap perspective

Overlap perspective in photography is when one object overlaps or merges with another object. Our brain immediately knows the object in front is the nearest of the two. If several objects repeatedly overlap in the same frame, we get a sense of depth and dimension. Overlap perspective is important in landscape photography.

Diminishing size perspective

With two objects of the same size and one of them closer to the lens, the nearest will appear being bigger than the object further away. The nearest fence post in a fence receding into the distance will look bigger than the ones furthest away. The closer you are to the object the larger it appears in the photo. If you move into a scene, the nearest objects will increase in size faster than the more distant objects. This effect is even more pronounced when using wide angle lenses.

Areal (atmospheric) perspective

Because atmosphere contains dust particle and humidity, contrast is highest for objects closest to the camera. Similar colors are clearer and more saturated close to the camera. The further away an object is in the frame the duller and more greys(ish) the colors become.

Another effect of the atmosphere is object near to the camera seems sharper or more in focus. The further away the objects are the softer focused they appear. They appear to be flat and dull due to the lower contrast.

How to change perspective when composing landscape photos

Use the right lens

Factors affecting linear perspective are focal length and distance between the lens and the subjects. If you use a wide angle lens, the nearest subjects will look bigger than more distant objects. This near foreground to background creates depth in the photo and is used a lot in landscape photography. The opposite is if you want to compress the foreground and background, then you should use a telephoto lens.

Move your camera (and yourself)

First and foremost you have to move yourself and the camera. Using a zoom lens and zooming in and out will not change the perspective. This is a typical misunderstanding. To change perspective when composing landscape photos you must change vantage point, nothing else will do.

Balance

Balance in photography composition is when all elements of the frame are positioned in such a way they have equal visual weight. You can also think about balance as symmetry. An unbalanced photo can be unpleasant to look at. Sometimes you might want to create tension in your image. A way of doing this is to make an unbalanced image. In landscape photography you will want to create a balanced image most of the time. I am sensitive to anything unbalanced, not only in photography. If a stack of magazines on a table is not aligned with the side of the table, it feels uncomfortable to me, and I want to correct this.

Symmetrical balance

You can create symmetrical or formal balance in photography by using objects of similar form and shape. You compose a symmetrically balanced photo by placing the elements equally on each side of the frame, almost like it is mirrored.

Think of an old type balance scale where you place equal weight on each side to balance the scale. If the two objects on each side have the same size and weight, it is a symmetrical balance.

In landscape photography a typical example of a symmetrical balanced photo is reflections of a mountain or another object in water. If you place your main subject in the center of an otherwise empty frame, your photo is balanced. But placing the main subject in the center often creates a boring picture.



Image above: Honefoss, Norway (f3.5, 1/250s)

Asymmetrical balance

Asymmetrical or informal balance in photography is different. Again think of the scale above. This time you balance the scale by using the same object on one side and two objects, each with half the weight, on the other side. This is an example of informal balance. The scale is quite easy to understand but in real life in landscape photography it, takes some practice to master informal balance.

When you do this right, an asymmetrical balanced image is more pleasing. If you place your main subject near one of the edges you can maintain balance by placing other elements on the opposite side.

Radial balance

Radial balance is not commonly used in landscape photography. You can think of it as a circle where elements are balanced around the center. If you throw a stone in water and photograph it from right above the ripples will move out in a circle. The ripples are an

example of radial balance. A sunflower with its petals is round and symmetric, another example of radial balance.

How to create balance in landscape photography

Small vs. large

In a composition, a large object has more visual weight than a small object. To balance a large object, you have to use two or more small objects.

Light vs. dark

Dark objects have more visual weight than objects with bright colors. The darker element can be balanced by adding other light elements or by adding elements with dark tones

Contrast vs. less contrast

You can balance elements with a lot of contrast with elements having less contrast.

Colors

Intense colors are perceived heavier than lighter muted colors. Complimentary colors tend to balance each other. It is similar to warm and cold colors. On the Color wheel you will find warm and cold colors on the opposite side. These opposite colors are complimentary colors.

Busy vs. simple

If one part of your scene is busy, you can balance it with something simpler on the other side.

Textures

Textured elements have more visual weight than similar object without texture. A brick wall is perceived heavier than a plain white wall.



Image below: Snæfellsnes, Iceland (f6.3, 1/100s)

Space and eye direction

Space can create balance in photography. If you place a person looking to the right near the right edge of the frame, it will look awkward, and we perceive the image as unbalanced. By placing the person to the left, the composition will feel more natural and pleasing.

Leading lines

Leading lines are very important composition elements in photography. The main purpose of leading lines is to guide the viewer's eyes to the main subject. A well-made composition keeps the viewer within the image and makes him look through all the elements. Smart use of leading lines in landscape photography can be the extra that makes the photo stand out from the rest.

The most typical leading lines in landscape photography are often man-made, like roads and fences. But there are many natural leading lines in nature as well. Rivers and streams are typical examples.

Different types of leading lines

Vertical lines

Vertical lines convey power and strength. Vertical lines can act as divider in your composition, and they can be used as natural framing elements. Typical examples of vertical leading lines in landscape photography are trees and mountains.

Horizontal lines

Horizontal lines convey a sense of stability. Typical examples of horizontal leading lines in landscape photography are horizons and shorelines.

Diagonal lines

Diagonal lines are dynamic and convey movement and energy as well as perspective and depth. A diagonal line starting at the bottom left corner feels most natural and dynamic.

Curved lines or S-shaped lines

Curved lines are gracious and denote a sense of quiet and softness. They are aesthetically pleasing and create stronger dynamic in a photo than straight lines do. Curved lines can guide the eyes around in the image in a smooth way.

Converging lines

Converging lines add depth and distance to photos, as well as scale and perspective. Converging lines are important in creating a three-dimensional look in an image. As lines converge into the distance, they get smaller and smaller. The point in your composition where the line converges can be a very strong focal point. Converging lines are one of the strongest composition tools we have in landscape photography.



Image below: Maridalen, Norway

PART SIX

Image editing

Which image editing software should you use?

Basic image editing skills are a must in digital photography. But you still have to know how to use a camera and how to compose a photo. A boring photo can never be turned into a great photo with post processing. Putting that much trust in digital photography is the same as claiming a writer writes better novels because he use a laptop rather than pen and paper. Everyone knows that's not the case.

All digital files need a certain amount of post processing before they do justice. The most basic editing is post cropping, color balance, brightness, contrast and sharpening. These adjustments can have a big impact on your photos. They are all simple adjustments you can do in all software I have listed below. And not to forget image editing is great fun and you can challenge your creativity.

Adobe Lightroom

In addition to being an editing tool, Lightroom is also a cataloging tool that keeps track on your photos. For most photographers unless you aim at being an editing expert you do great with Lightroom. I use Photoshop when I need to do complex masking and layers.

Adobe Photoshop

Photoshop is the industry standard for photo editing. The learning curve can be steep, but there isn't a thing you cannot do in Photoshop. In the Creative Cloud photographers bundle from Adobe both Lightroom and Photoshop are included. This is a monthly subscription currently (2016) costing US\$9.99 a month.

Adobe Photoshop Elements

Have most of the features Photoshop has. The user interfaced is more intuitive with a less steep learning curve.

Free software

Gimp (www.gimp.org)

At no cost you get a powerful editing tool. Gimp is an alternative to Photoshop but no substitute. For a beginner learning image editing Gimp is a good option. A cool thing is Gimp supports layers and layer masks. Another thing to consider is there are much more tutorials and training material available for Photoshop. If you work with RAW files you will have to install a plug in in Gimp to be able to import the RAW files.

Paint.Net (www.getpaint.net)

Is similar to Gimp but for Windows only.

Pixlr Editor (www.pixlr.com)

On line based image editor (no download needed). You can do the basic edits and a lot more with Pixlr. No RAW support. Pixlr is a great option for minor editing work and resizing.

Got a landscape photography question or a photo to share?

Questions?

Ask them here

<http://www.landscape2art.com/contact-landscape2art.html>

I read every single question and I promise to do my best to answer as many of them as possible.

I would love to see your landscape photos.

Upload your best photos here

<http://www.landscape2art.com/share-your-best-landscape-photos.html>