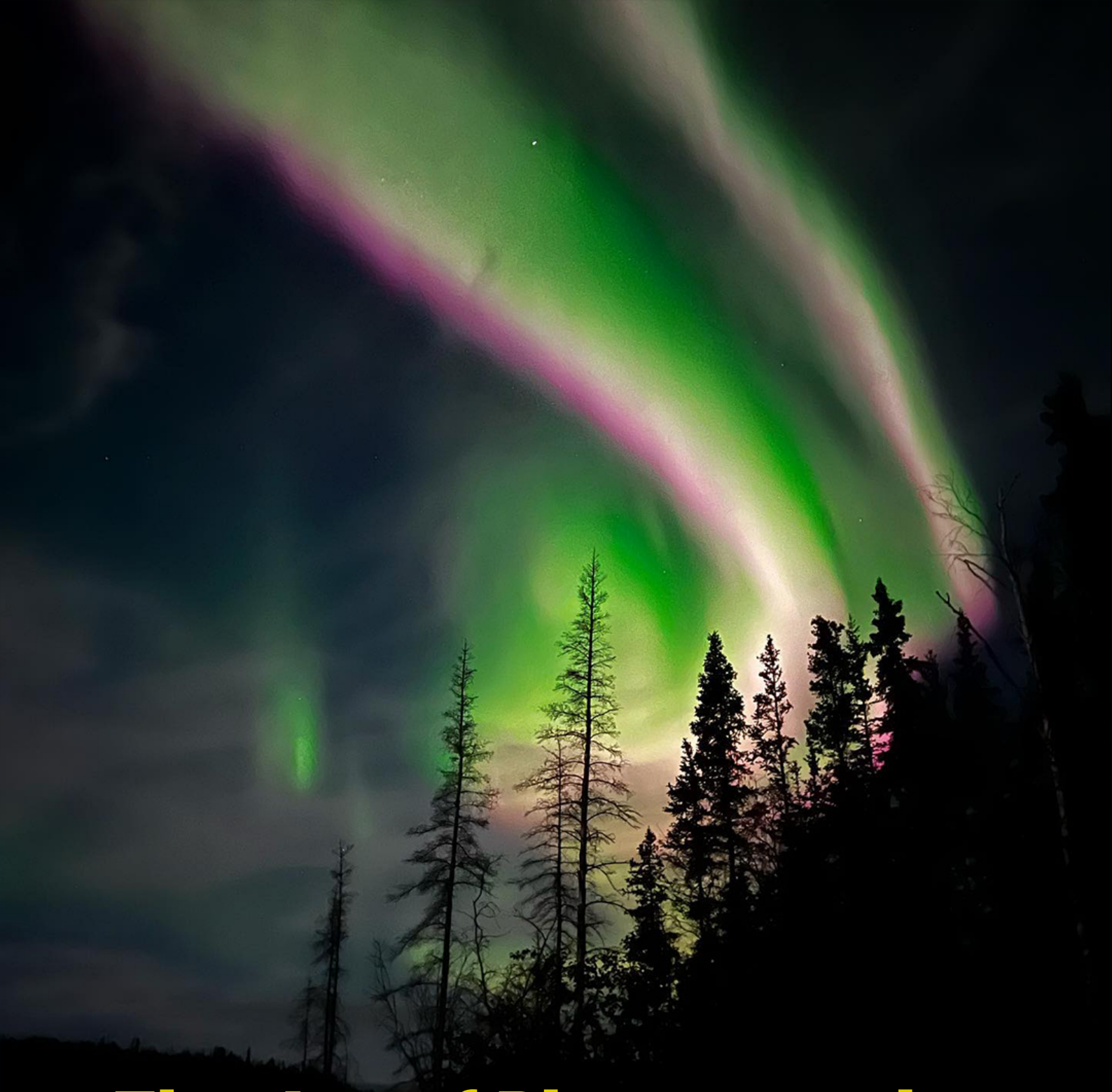

The Art of Photography

Gear Guide & Techniques: Volume 1

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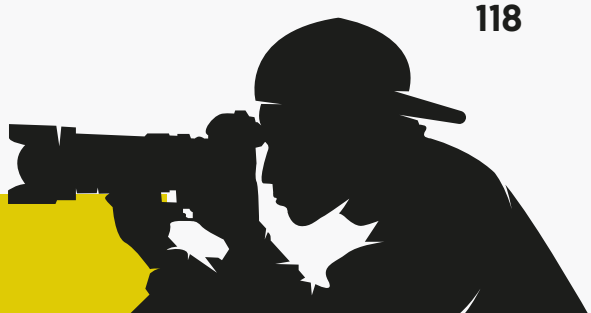


Getting Started

Photography saved my life...or at least my career.

By day, I work as an entrepreneur and marketer. I love my work, but like any professional, I've learned that it's entirely too easy to be consumed by your work. I've been working in this field for about 10 years, and about 5 years ago, I realized that I needed a creative outlet or I was going to crack.

That's when photography entered the picture (pun intended).

I'd always been fascinated by the stars, and photographing them perfectly had always been a dream of mine. It had long been relegated to "someday" territory, but I realized that the right moment to explore photography wasn't just going to present itself to me: I was going to have to make time for it.

So I carved out some time in my schedule, and first up on my photography agenda was
figuring out how to capture the universe. Why start small when you can shoot for the stars, right? I enlisted the help of some friends and studied the work of other inspiring photographers, and got to work. In a very short amount of time, I was hooked.

Over the years, my style has developed and I have found that I'm particularly passionate about landscape photography, though I'm always exploring new techniques and subject matter.

Getting Started

Photography has become more than just a hobby, but a way of life. It's been a lifesaver in terms of helping me attain balance in my career, and it's expanded me personally, creatively, and culturally. It's taken me to new places, both literally and figuratively.

I love collaborating and sharing my work with others. I always strive to capture surreal landscapes. My goal is to inspire and encourage others to get out into nature — it's a beautiful and enlightening experience.

This book combines some of the techniques I have learned over the years. I hope that they will inspire and inform you in your photographic adventures.

Stay updated with my photography!

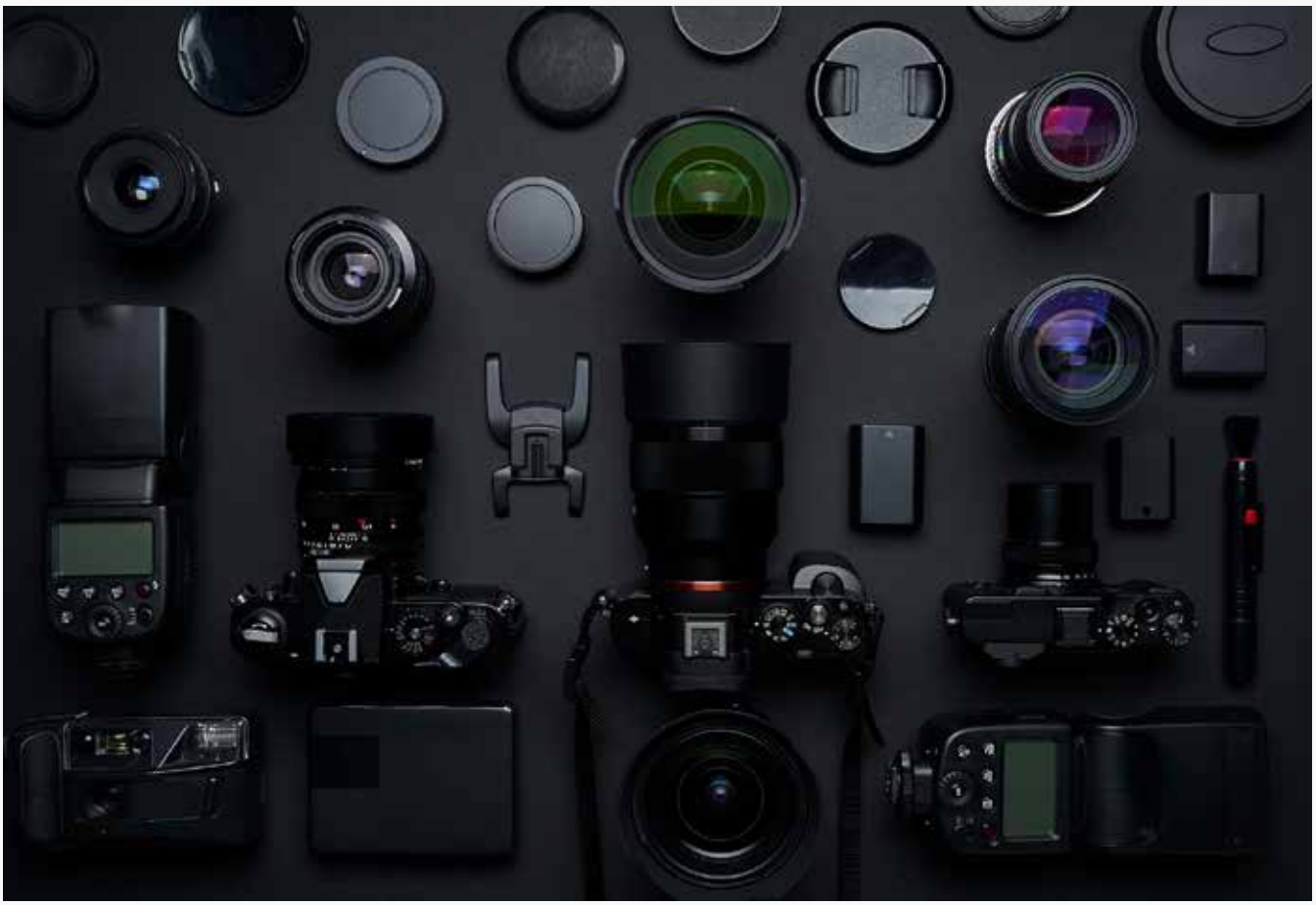
Instagram: @dhavalilama | Blog: dhavalilama.com

Getting Started

Not sure where to start on your photography journey? Start here.

This section includes some of the basics you'll need to get started, including a reference guide to suggested tools and equipment and a few basic concepts and techniques.

Photography Gear Guide



Before you can take great photos, you need the right gear.

No, fancy gear will never replace raw talent. But the appropriate tools can make a huge difference when it comes to your finished results in photography.

Getting Started

Some of the most frequent questions I get asked by budding photographers revolve around what kind of camera I use and what gear I bring with me when I go out on photographic shoots.

I've put together this gear guide to highlight some of the key products I use. While every photographer is different will have their own preferences when it comes to the brands and specific gear they use, this is a list of my personal favorites to help get you started::

Cameras and Lenses

In the world of photography, SLR means Single-Lens Reflex. You'll also see it as DSLR (the D stands for "digital"). This is a camera that uses a mirror and prism system to let you view through the lens exactly what you'll be capturing.

In my opinion, the Canon EOX 5D Mark IV Full Frame Digital SLR Camera Body is one of the best on the market. It's super versatile, offering up to 7.0 frames per second continuous shooting speed and a 61-point AF system with 41 cross-points for expanded vertical coverage which is super important for the types of shots I like to capture.

I also love the 4K video recording capabilities of this camera. Overall, it's full of great features, and they can all be accessed easily from the touch-screen LCD monitor.

Canon really makes owning and using a high-powered camera simple—which is why I love it. If you want great technology and features but don't want to spend a lot of time trying to figure them out, this camera might be perfect for you.

Getting Started

Mirrorless Camera: Sony A7 III Mirrorless Camera

A mirrorless camera, also called a mirrorless interchangeable lens camera, is a camera that has a single removable lens. Unlike the SLR, it uses a digital display--not an optical viewfinder.

When it comes to cameras, I'm not loyal to one specific brand, but rather I look at a camera's individual features. So even though I love my Canon SLR, I also have a Sony A7 Full-Frame Mirrorless Interchangeable-Lens Camera.

I love how easy Sony makes it to switch out lenses (not only their native lenses but adapter lenses as well) and this particular camera has a ton of bells and whistles that any photographer could love. I have a lot of Canon lenses in my gear bag, but Sony works well with adapter lenses. If you are looking for a mirrorless camera, I highly recommend this one.

Note: Speaking of switching out lenses, I also recommend this Canon EF Lens to Sony E Mount T Smart Adapter. A powerful adapter is a must-have and while it may not be quite as fast as a native lens in every situation, this adapter is going to get you close.

Wide Angle Zoom Lens: Canon EF 16-35 mm Zoom Lens

I am really particular about my wide angle lenses, so it means a lot when I say that this ultra-wide angle lens really impresses me. It has a f/2.8 maximum aperture and 3 high-precision aspherical lens elements which results in really clear pictures.

It autofocuses quickly, has fast internal focusing, and its circular aperture is great for eye-catching natural background blurs.

If you have a camera that fits the Canon EF 16-35 mm USM Zoom Lens For Canon EF Cameras, I'd consider this lens a must-have.

Standard Zoom Lens: Canon EF 24-70 mm USM Standard Zoom Lens

Another Canon lens you'll always find in my bag is the Canon EF 24-70 mm f/2.8L II USM Standard Zoom Lens. It's a reliable, great-quality zoom lens that really emphasizes image stabilization so you get super-clear images.

If you are interested in UV filters or polarizers for your outdoor photography, there are also these options available with this lens as well.

Telephoto Lens: Canon EF USM Telephoto Zoom Lens With 3 Filters

I really like this telephoto lens kit from Canon because it really comes with everything you need if you are going to be using telephoto lenses. I am not normally really big on "kits" but this one is really an exception.

Why? Because it will save you money as opposed to buying all of these items individually, and the telephoto lens itself and the filters are really top-quality. This telephoto lens is a 100-400 mm f/4.5-5.6 lens and really delivers outstanding contrast and resolution. If you are shooting sports or wildlife, this telephoto lens is going to make a big difference in your finished photos.

Getting Started

Accessories

While your camera and lenses are the most important tools, there are some accessories that can really help augment your finished results. Here are some that I swear by:

Filters: Haida NanoPro Essentials Filter Kit

Here's a kit that offers plenty of bang for your buck. The Haida NanoPro Essentials Kit comes with a 100-Pro Series Holder and 77mm 100-Pro Adapter, a Graduated ND 0.9 Soft Edge Filter a NO 3.0 Filter and an 82mm CPL and 6 Filter Pouch.

While this is considered a "starter kit," it's stocked with all the essentials I need, so I still carry it around with me all of the time.

TriPod: Benro Mach3 2 Series Aluminum Tripod

A great tripod is a must-have for any photographer. It's important to find one that is durable and sturdy, but remember: you might have to carry it for considerable distances, especially if you're photographing in nature. So you want the perfect balance of heavy enough to keep your camera in place, but not so heavy that it's torture to carry.

I personally use the Benro Aluminum Tripod—and I absolutely love it when I am taking time-lapse photos, landscape photography and night-time shoots. It's relatively lightweight, but sturdy enough to keep your camera as still as possible, so you get super clear photos

Getting Started

Ball Head: Benro Triple Action Ball Head

A great tripod is only as good as the head you use. This is why along with my Benro tripod I also use the Benro Triple Action Ball Head with PU70 Quick Release Plate.

I can use this on location or when shooting in a studio and it has all of the basic bells and whistles that you want with a head, and it of course works seamlessly with my tripod. It has a large locking knob for precise control of the ball's motion and 360 degree panning capabilities.

However, some of my favorite features include the small separate knob on this head that adjust friction control and the 90 degree notch that allows me to switch my camera into portrait mode. Together with my tripod, this head helps me handle virtually any type of shoot when I'm on location.

Drone: DJI Mavic Pro 4K Quadcopter with Remote Controller

Do you need a drone? Maybe not. Are they a ton of fun? Yes! If you're anything like me, then you love all of the aerial magic you can capture with the right drone.

The DJI Mavic Pro 4K Quadcopter with Remote Controller is a favorite of mine because it is super easy to control and use (you can actually use your phone) and it is fully stabilized for really smooth footage. If you have been debating on what type of drone to get, trust me--this is the one. It even comes with an extra battery and all of the accessories you need.

Getting Started

Cleaner: FOTGA Professional Rocket Cleaning Air Blower Duster

Nothing annoys me more than to see other photographers spending all their money on high-end equipment and then failing to actually take care of that equipment. The right air blower is essential to keeping your equipment clean, and the Professional Rocket Cleaning Air Blower is by far my favorite.

It's small, simple, effective and easy to use. It will clean all of your lenses, filters, and cameras--and you can use it on your computer, too. I love that it has a free standing function making it even easier to use.

Gear Bag: Lowepro ProTactic Camera Backpack

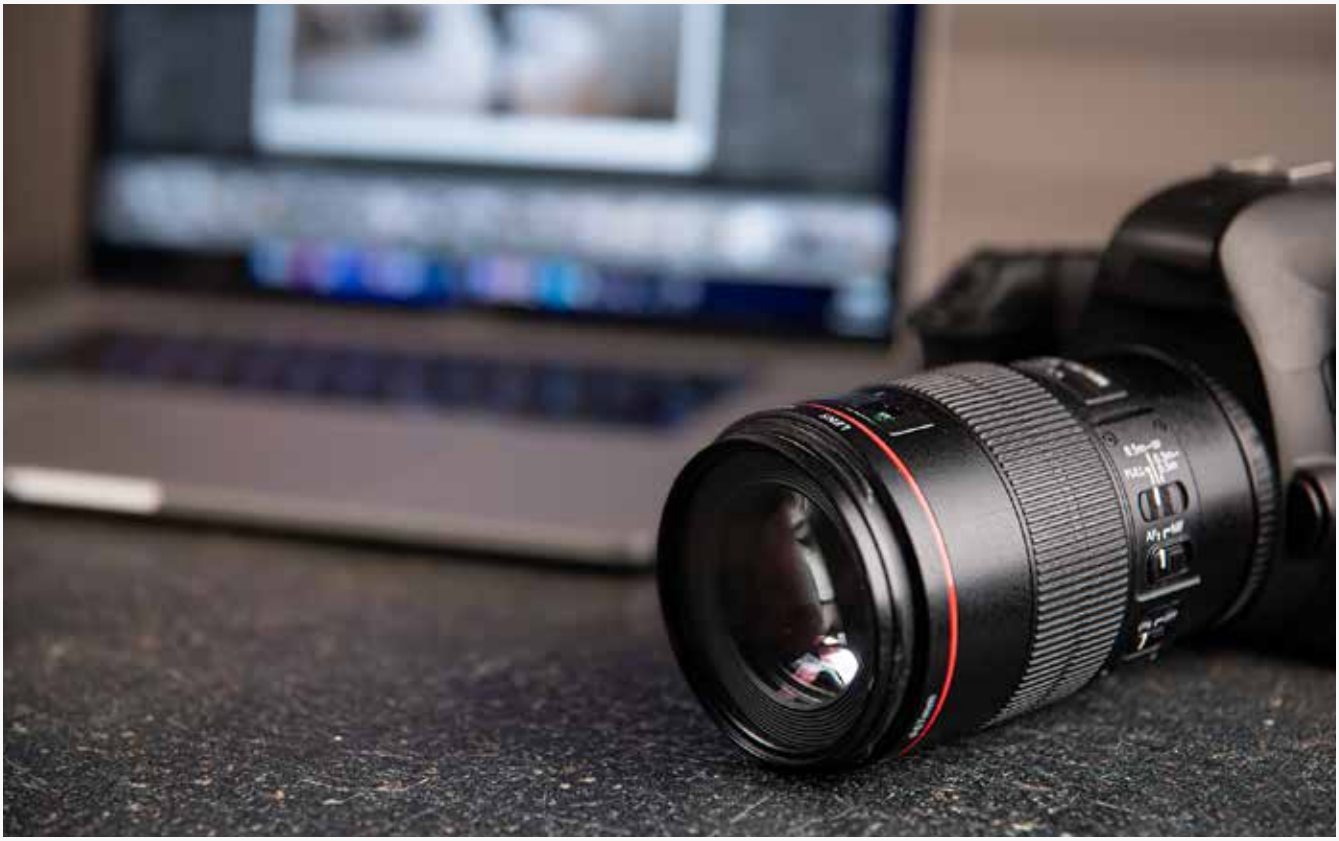
Once you've assembled all of your gear and accessories, you've got to tote it all around somehow. My favorite vessel? The Lowepro ProTactic 450 AW Camera Backpack.

I love this backpack because it looks great, it is super durable, and designed to protect your gear in any conditions, and it makes it simple to get to all of your gear in an instant (it has four access points).

In addition to the backpack itself, it also comes with a water bottle pouch, accessory case, tripod cup and two cinch straps as well as a separate laptop compartment. Literally everything you will need for a photo adventure can fit right in this bag. It's a must-have accessory for me.

Getting Started

Basic Techniques and Terms



The right tools won't do you much good if you don't know how to use them.

Ultimately, the best way to really master the art of digital photography is trial and error—spending the time to learn about our own style, your own device and your own post-photography editing process.

However, by educating yourself on some basics, you'll have a leg up on getting started--and you'll better understand the terms used in photography tutorials online and in this book.

Here, I'll offer up some basics to help forge a foundation for you to learn more about how to become a proficient digital photographer.

Getting Started

Exposure

If there is one thing that beginner photographers should be paying close attention to, this is it. Exposure refers to the darkness or lightness of a shot based on your camera settings. It's one of the keys to capturing a great photo: the right exposure can bring out subtle details of an image, where the wrong exposure can leave it too bright or muddy.

Exposure is made up of three elements: aperture, shutter speed and ISO. These three elements will impact the depth of field, motion blur and digital noise.

You will use these settings when you want to start actually using the manual mode on your camera. This is the first step in really gaining control over what you are shooting and changing the result of your photos. It is the difference between someone who points and shoots and someone who is taking photographs.

Here's what to know about the three elements of exposure:

Aperture

perture is the diameter of the hole inside a camera lens. When you change the size of this hole, it allows more light or less light into the camera. A wide aperture means more light, while a narrow aperture means less light.

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This also has an impact on the depth of field of your image. For instance, if you just want to focus on one thing in the foreground, you will want a wider aperture or shallower depth of field. If you want several things, at varying levels to come into focus, you want a deeper depth of field and a narrower aperture.

You'll want to set your aperture before focusing on your subject matter.

Shutter Speed

Once you have your aperture in place, you want to make sure that you set the shutter speed. When the mirror flips up on a camera, and the shutter opens, it records the light present onto the sensor. The speed at which this motion happens will determine the exposure length as well as the amount of motion blur.

Depending on what you are shooting, you may want to show some motion blur, or none at all. If you set your shutter speed to a fast speed, it means less light and that it will freeze your subject in motion with no blur. If you use a slow shutter speed, it captures more light and more blur.

ISO

The sensor that captures light is controlled by the ISO. When you set your ISO remember, the higher you set it, the more sensitive it will be, but the more digital noise you can capture. A low ISO is less sensitive while a high is more sensitive with more noise. ISOs can typically range anywhere from 100 to 24000.

While exposure may be one of the more complicated aspects of mastering digital photography, it is an important foundation that every photographer needs to learn. Once you have learned how these three elements of exposure work together, then you can start really honing your skills.

However, moving on to learn more about composition, framing and post-production is pointless if you don't first understand exposure.

Other Essential Elements of Digital Photography

Metering Modes

Metering modes are there to tell your camera how you want to look at the scene in front of you. Different metering modes are going to cause you to end up with different exposures. There are three primary types of metering modes on modern digital cameras:

- **Evaluative Metering Mode:** This mode divides the scene up into a grid and analyzes each segment—looking for highlights and shadows. The camera will then take that information, calculate the average value and base the exposure on that value. This is great for a scene that has relatively similar bright and dark areas, but not one for varying high contrasts.

- **Center-Weighted Metering Mode:** This type of metering mode places the most importance on the central portion of the frame—focusing on a central circle in the middle of the scene. This is the most commonly used metering mode by most digital photographers.

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- **Spot Metering:** This metering mode only measures the light from a very small part of the scene. Most digital cameras will allow you to arrange the placement of the spot as it usually only makes up about 5 percent of the total scene.

Setting up the right scene requires shooting in Manual more often than not. Avoid the GREEN button (auto mode).

Shooting Modes

One of the great things about shooting with digital cameras is that there are so many different modes and settings on today's modern camera devices. When you are ready to take a photo, you may notice that your camera has several shooting modes.

You can choose between complete auto mode, manual mode and typically several settings in between. There are some photographers who may tell you that manual-only is the way-to-go, but sometimes it is worth it to let technology take hold and do some of the work for you.
You can also shoot in AV mode which can come in handy when shooting time-lapse photography.

Getting Started

White Balance

White balance is important component in digital photography, but it is one that many beginners don't learn early on in their efforts. The white balance feature will change the color cast of an entire photo—it is responsible for adding warmth.

Simply put, the white balance will determine whether your photo has a cool blue tone or a warm orange one. Just take a look at different scenes that utilize color balance and those that don't to see what a difference it can make.

Crop Factor

Most beginners shooting on digital cameras will be shooting on a device that has a crop sensor in it. This sensor is much smaller than professional-grade SLR cameras and will essentially crop the image when you take a photo.

Basically, it makes a narrower viewing angle for your photos and impacts which lenses you can and should purchase in the future. Even if you aren't ready for new lenses yet, it is important that you remember this and do your research whenever buying a new lens for your camera.

Don't lose your scale and clarity — make sure you get a full frame camera!

Getting Started

Polarizing Filters

Filters are a great addition to any digital camera and while there are countless filters that pros can ultimately explore, for newbie digital photographers, it is best to just stick with polarizing while getting started.

These filters allow light into the lens only from a certain direction. What this does is it removes glare and reflection from non-metallic objects. It can also be great for sunset photography . This is something that will not only improve the look of your photos, but also help you in post-production as you won't ever be able to get the same effect of this filter in post, so it can really save you some time.

Section 1
Faces and Places

Section 1 - Faces and Places

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"There is one thing the photograph must contain, the humanity of the moment."

Robert Frank

Photographing people and places is fascinating, as these subjects really allow you to really capture a moment in time.

However, to make sure you capture the moment in the most compelling way, it's important to consider things like lighting and composition and what the goals are for the portrait.

In this section, I'll introduce some common situations where you might be photographing people or structures, and offer advice for how to best capture them and make the most of your photo session.

Natural Light Portraits

When it comes to capturing stunning portraits, natural light is always going to be your best friend, no matter who your subject is.

The right lighting can completely make or break this type of image and be the difference between an ordinary photo of someone's face and a memorable, emotion-provoking portrait. Lighting truly is that powerful.

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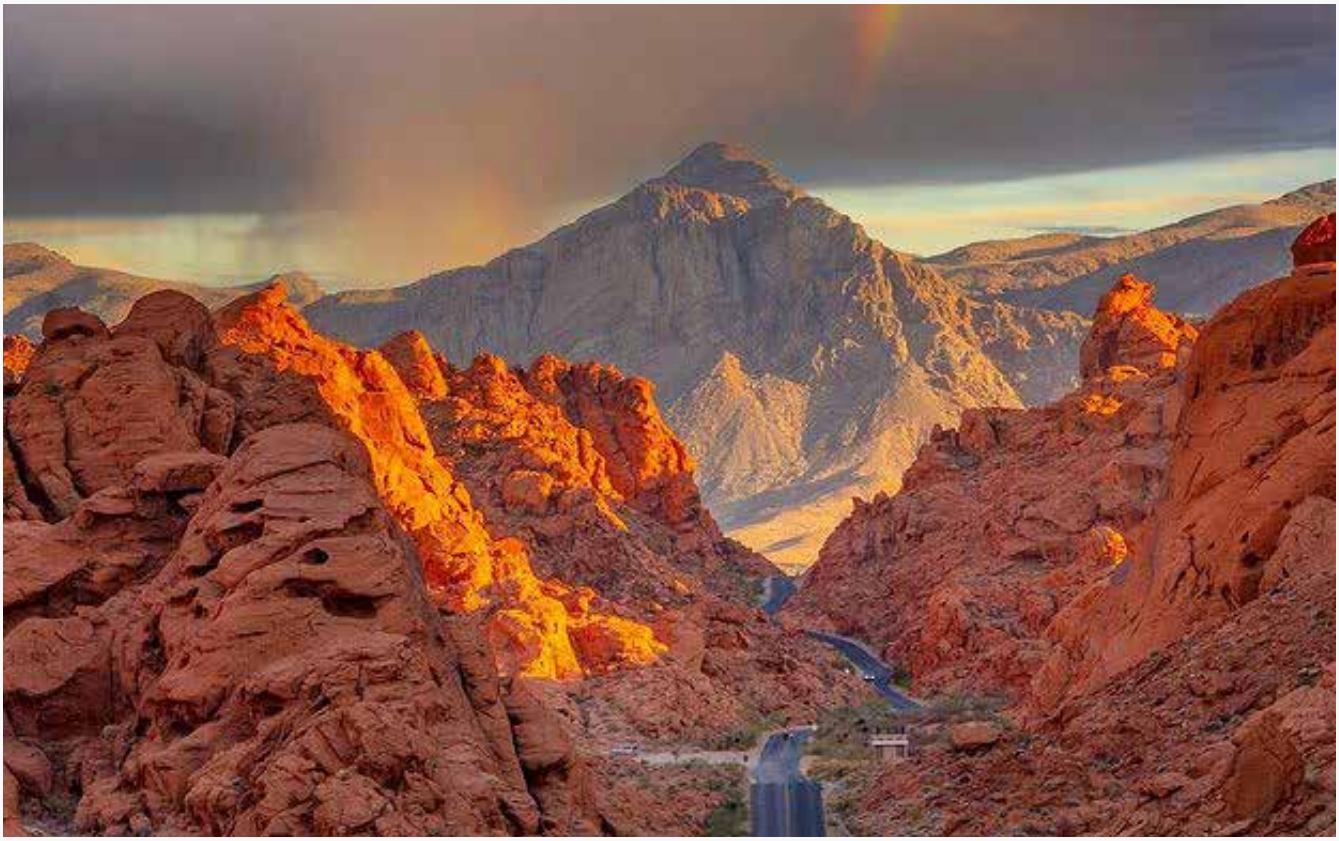

If you're working in a studio, you have the ability to adjust, manipulate and manage all of the lights in an enclosed space to get the perfect backdrop you need.

When you shoot outdoors, you don't have that luxury. However, you do have the ability to take advantage of a free and natural lighting source instead of investing in flashes, strobes and modifiers.

Set Yourself Up For Success

When shooting an outdoor portrait using natural light, you may not have to deal with bulky lighting equipment, but you still need to make sure to have the proper setup.

Section 1 - Faces and Places

This is why you need to start with the right gear, the right settings and to consider these tips in order to capture a stunning, natural light photo of which you can be proud.

Camera Mode

Before you start snapping away for your perfect natural light photo, you need to make sure your camera is on the right mode.

With so many variables that come with this type of photography, it is always best to shoot in manual mode, so that you have total control over your settings. It requires a little more work and a little more thought, but it really will make all the difference.

Aperture

Some of the best natural light portraits are those with a clear image of the subject and a nice soft blurred background. The key to attaining it? Use the largest aperture possible.

The best option is a f/1.8, but it can be quite a big investment as the larger the aperture, the more expensive the lens. If you aren't quite ready to make that type of investment anything f/4 or bigger will work too.

While the right aperture can make all of the difference, if you are just getting started and don't have this type of professional lens, there are some easy hacks that can help you attain a similar effect.

Section 1 - Faces and Places

Here's one: simply put some separation between the model and the background that you are looking to blur. It will naturally help create that focus on the subject, and it will draw the viewer's eye into the model and away from any background noise.

Shutter Speed

The right shutter speed can be the difference between a clear shot that highlights every detail of your subject's face and a blurry mess. When choosing your shutter speed, you should use a minimum of around 1/100th of a second or faster.

The truth of the matter is that even professional models are going to be in constant movement, if you want to capture a single, clear moment in time with them, then you need to make sure that you have a fast shutter speed to capture it.

ISO

Another decision you will need to make when shooting your portrait in manual mode is what ISO you will be using. Remember, you are using a fast shutter speed, but you will want to choose the lowest possible ISO given your shutter speed.

Lenses

This is perhaps the most discussed part of shooting a natural light portrait: what lens do you use? If you happen to be shooting with a telephoto lens then you are all set when it comes to creating that sharp foreground and blurred background in your photo. You don't even need a large aperture.

Section 1 - Faces and Places

In general, when shooting portraits like this, the longer the lens the better, especially when you are looking to soften the background and make your subject's face more clear and crystalized.

However, my advice is to never shoot a portrait with a wide angle lens—it will distort the face.

Timing and Weather

Now that your camera is all set to take advantage of the natural light, it's time to capture the portrait. But what kind of light is best? There are a few different options to consider, but they are all based on the moment and your setting—you can't just manipulate the sun.

The natural light that you have will greatly influence the style and tone of your portrait. With this in mind, here are a few tips on some flattering times for natural light and what you can expect them to do to your images.

Sunset photos: Just before dusk is a great time for want soft light. This is the best condition possible for a soft light photo and gives this ethereal glow that no other setting can really give off. There's a reason why photographers call it "the magic hour"!

Overcast lighting: This is actually a very underutilized form of lighting. Just because there isn't a bright sun in the sky, it doesn't mean that you can't get a truly stunning portrait. Overcast lighting gives off a very large softbox effect with soft lighting all around that can help dark colors pop and give a real feeling of emotion to a shot.

Section 1 - Faces and Places

Window light: Natural light near a window is also a great option. If you are shooting indoors, it doesn't mean that you can't also capture the power of natural light by simply placing your subject near a window. Depending on the positioning, window light can give a nice, subtle glow to one side of your subject's face and create dimension in your photo.

Bright light: While bright daylight might seem harsh, it doesn't have to be a portrait-killer. If you are planning on shooting in the middle of the day when the sun is out and bright you can use a light diffuser. This actually takes that bright sun and turns it into softer light and the effect can be really beautiful.

When it comes to shooting portrait photography, the right lighting can make all of the difference in how your final product turns out. Stunning portraits can be difficult to capture, but if you use the right settings, camera and understand what natural light can do for you, you may be surprised by what images you can capture.

Wedding Portraitrature

For so many happy couples, the day of the wedding goes by in a blur of greetings, well wishes, and tears of happiness. Perhaps that's why the wedding photos are so cherished: they act as a tangible reminder of one of life's greatest moments.

A great wedding portrait is a timeless, memorable artifact that couples will keep for the rest of their lives—and if you are the photographer in charge of taking those portraits, the pressure is on.

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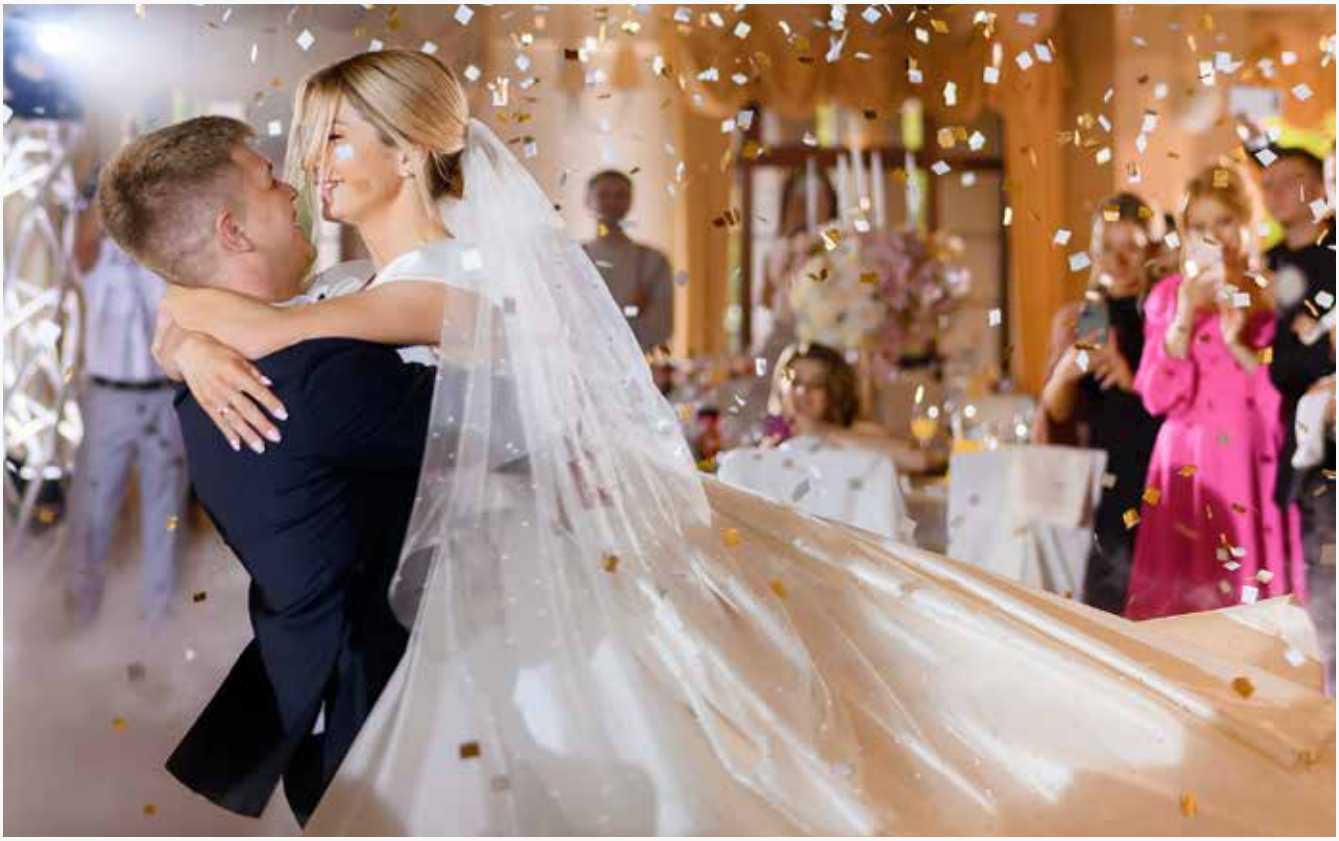


Wedding portrait photography is very specific type of photography that can be complex to capture. As a photographer, you have to juggle emotions, many personality types, and time crunches...and you need to be able to capture standard portrait poses all amidst the challenges of shooting live-action photos the day of the wedding.

Even the most seasoned photographers who have a great deal of skill and talent will sometimes struggle with the unique challenge of shooting wedding portraits, which require the perfect balance of good lighting, good composition, proper exposure and the right pose.

Happily, there are a few things that you can do in order to ensure that you get the results you want. This section offers a guide to shooting wedding portraits so that you can make sure that any couple you are photographing will cherish their images for years to come.

Section 1 - Faces and Places

Lighting

Lighting is one of the most important elements of a great wedding portrait. Unfortunately, it's also one of the most difficult things to control.

Most people don't have their wedding portraits done inside a portrait studio where you can control the lighting—so as a photographer you are going to need to be creative, think on your feet and deal with lighting issues as they come at you.

The good news is that if you are able to gain control of your lighting, it is the best tool to making any wedding, any bride and groom and any portrait look beautiful.

However, lighting can come in all different forms and functions. It can be the backlighting from a DJ booth, the natural soft light from a setting sun, or the twinkle of candle-light bouncing off a chandelier.

So, with so many variables, how do you get the lighting right? Happily, with wedding portraits, you have a little more control over the situation and slightly more time to set up your photos (when compared to chaotic moments like sweet glances between the bride and groom or the bouquet toss). So, you can really do your best to use your lighting to your advantage.

The biggest decision you will have to make is whether or not you should use natural or artificial light.

Section 1 - Faces and Places

Natural Vs Artificial Lighting

The biggest rule of thumb with taking wedding portraits is if there is already good lighting within the space, then make use of it and leave the flash off. You can manipulate your posing and positioning to help keep the light in the right spot and to use it in the right way, but if you want soft, natural looking wedding portraits, natural light is the best option.

However, there are always exceptions to that rule. If you feel as though the existing light is boring, or there isn't enough contrast, then flash can add some interest to the scene.

If the natural lighting isn't cooperating on the day you are shooting a wedding and the
couple is turning up underexposed, or if the sky is overexposed or it's super cloudy, a flash or a reflector can be your best friend. Low-powered flashes are particularly popular for wedding portraits.

Remember: the lighting can drastically change the style of photo. So while you have time to mess with the lighting during portraits, you don't want to do too much, as it can completely change the look and style of your portraits. The couple likely hired you for your unique style—try to stick with what you know.

Composition

Wedding portrait composition is so different than any other type of portrait—mostly because you are dealing with two people and looking to capture a lot of emotions with one posed picture.

Section 1 - Faces and Places

Here are a few ideas for composition that can help you get the best final result for your wedding portraits:

Position the Couple to the Side

Don't forget about the rule of thirds when shooting wedding photos. This includes both portraits and action shots. If you aren't sure where to put the bride and groom, position them to the side—just anywhere but the center.

Don't Be Afraid of Close-Ups

Close-up shots don't always have their place in normal portrait photography, but at weddings, the close-up can be a great option. Getting close-up in your composition can include an extra sense of intimacy to your images.

Plus, it is a great way to crop out the extra background noise and focus on what the day is all about—the bride and groom.

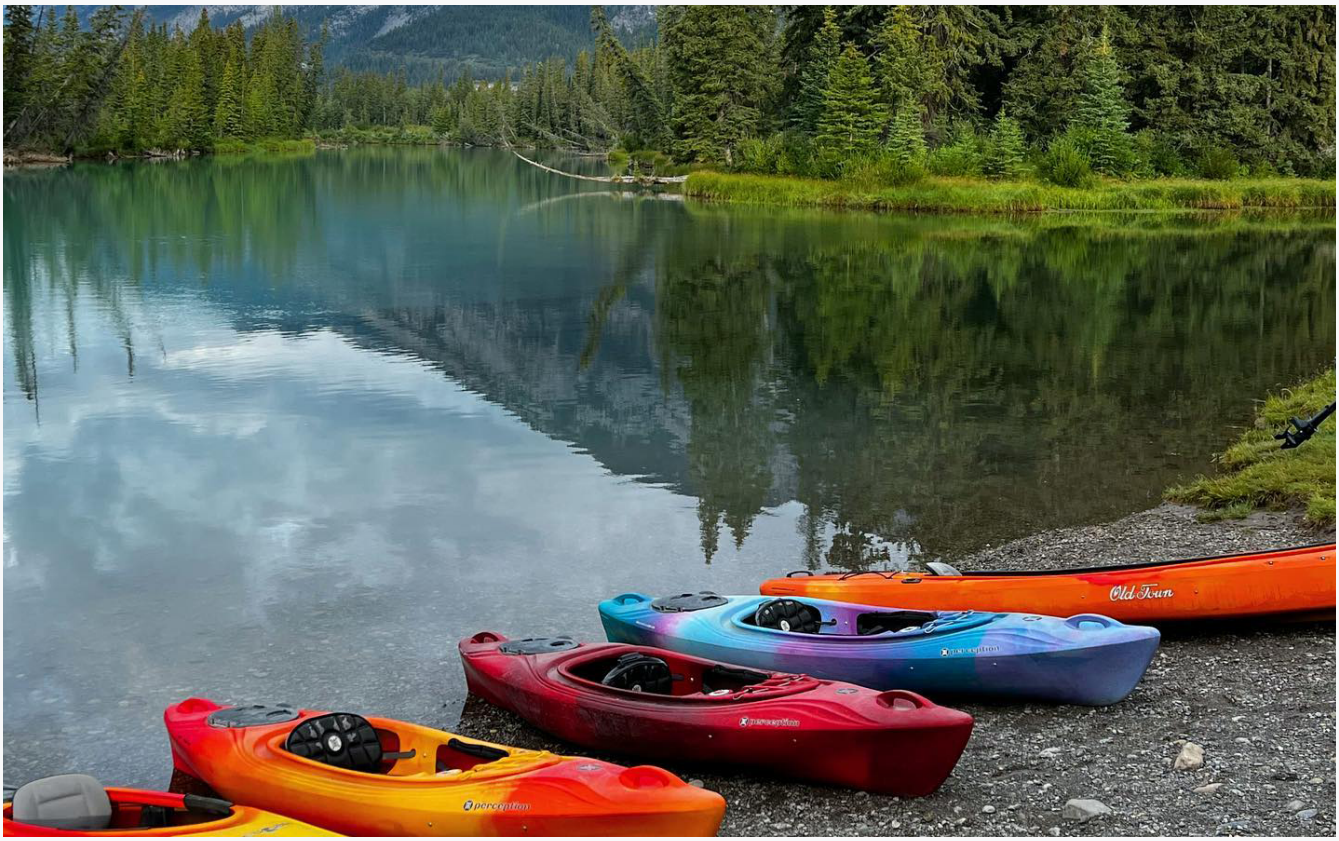
Catch Some Single Portraits

Not all portraits need to be of both the bride and groom together. It's nice to have some solo portraits as well. However, you should still try to focus on the relationship between the two individuals in these solo portraits.

For example, take a portrait of the bride's face, but have her leaning on the groom's chest. Or have the bride's hand visible in the groom's portrait. The more you can do to reflect the relationship between these two, the better.

Section 1 - Faces and Places

(Side Bar) What's the Rule of Thirds?



The Rule of Thirds is a basic composition guideline that is useful in all sorts of visual arts endeavors, including photography.

The basic idea behind the Rule of Thirds is that every composition should be imagined as a grid with three rows horizontal and three rows vertical (think: hashtag symbol, but with three intersecting lines instead of two). Important parts of the composition should fall along these intersection points for the most pleasing visual for the viewer.

While some cameras will have a feature that lets you see an outline of such a grid while taking photos, after a while some photographers find that it becomes second nature.

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Striking the Perfect Pose for Wedding Portraits

Perfect posing is vital to wedding photography success. You want the bride and groom to look natural versus staged in photos, as this is one of the most noticeable parts of a wedding photo.

So, how do you make sure that your subjects look their best and are happy with their wedding poses? Here are some tips for the best results:

Focus on Arm Placement

One of the big complaints from brides and grooms is that they don't know where to put their arms. Most people naturally just put their arms straight at their sides, but this will look unnatural and awkward in photos. Take the time to position the arms so the couple looks comfortable.

For example, when the couple is posing together, interlock their arms or have them hold hands.

You can also try to create angles with the arms to make them look more natural and make the bride and groom look more comfortable. For grooms, a great way to do this is to have him put his hand in his pocket. For brides, a great option is to have her hold her bouquet in front of her and below her waist, to give the arms a pleasing angle.

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Focus on Posture

Posture is super important because it helps people look strong, confident and beautiful. If the happy couple is slouching in their portraits, it isn't just distracting, but it can actually make them look unhappy--not the best look on what should be the happiest day of their lives!

A great way to make sure that brides and grooms are maintaining proper posture is to have them take a deep breath in and push their shoulders back so that you can capture them in a strong, confident pose.

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Adjust The Legs

Weddings are long events, and the bride and groom are going to have to stand for long periods of time during this day. This can understandably make any bride or groom feel uncomfortable, so make sure they are adjusting the position of their legs so that their knees aren't locked in the photos.

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Suggest that your subjects switch which legs they are placing their weight on during the pose. These adjustments will help the couple feel more relaxed and comfortable and look more natural in their photos.

A Final Note On Capturing Perfect Wedding Portraits

There are many factors that are out of your control while shooting weddings, it's important to do some prep work before the big day to ensure success.

Scout locations ahead of time and test out the lighting and have a back up plan in case the weather doesn't work in your favor. Think of poses that you can put the bride and groom in and make sure that you talk to them about what they are looking for with their portraits.

Planning ahead will be your best tool in making sure that these wedding portraits turn out exactly as you want—and fulfill your bride and groom's every wish.

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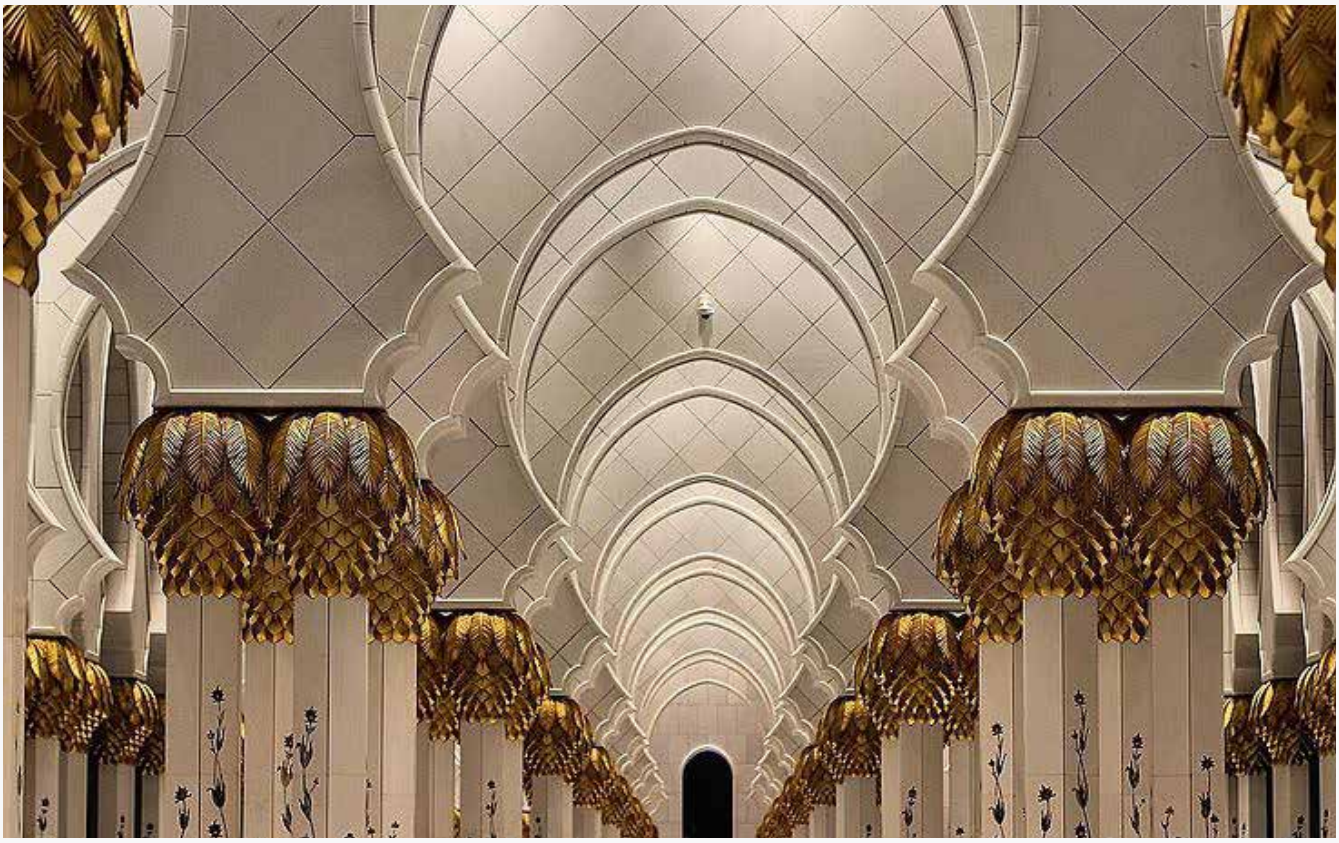
Architectural Photography



Whether you have a love for historic buildings or are more intrigued by modern skyscrapers, feats of architecture provide plenty of fodder for photographic subject matter.

However, taking the perfect architectural photo can prove tricky. It can be difficult to graduate from the typical tourist snapshot and into artistic territory with buildings.

But if you take the right approach, you can end up with stunning, jaw-dropping architectural photography that really captures the beauty of the subject of your images.

These tips and considerations will help you get the perfect shot, no matter what type of structure you're shooting.

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Shoot in a Variety of Times and Weather Conditions

The weather and time of day can have a big effect on the finished look of your photo. Since these buildings aren't going anywhere, try photographing your favorites at a variety of times of day and in a variety of different weather conditions for the most compelling shot.

For example, a photo taken at sunset can showcase shadows and cast unique colors on a building. Then again, shooting in the snow can add breathtaking contrast and drama to an otherwise static image.

Try Unexpected Angles

Don't fall into the trap of thinking you need to get the entire building in a head-on shot. To create some visual interest when shooting architecture, play with perspective and try new angles. Don't be afraid to get down on the ground or crawl on the floor if you need to for that perfect angle!

Ultimately, your goal is to frame this building in a way that shows its uniqueness and what makes it appeal to you. So take the time to really evaluate the building from a variety of points of view and consider which views are most compelling and can make the building look exciting through your lens.

Focus on Lighting

As every photographer knows, good lighting is the key to a great photo. This is particularly true when it comes to shooting architectural photos, so be sure to consider the lighting both inside and outside the building depending on where you're shooting.

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With interior photos, try to shoot in the middle of the day when bright lights can come in from windows and highlight different aspects of the building and create interesting images that can really make an impact.

If you are shooting an exterior photo of architecture, aim for sunrise or sunset to create a soft ambiance that will highlight but not take away from the beauty of the building itself.

Include People

There are some people who think that architectural photographs should never include people—and that instead they should focus only on the building itself. Why be held back by rules? If you want to include people in your shots, do it!

After all, buildings are created by people and for people. People are also inhabiting and caring for the buildings, so they are part of the architectural experience. Capturing people interacting with a piece of architecture can help create fascinating shots that tell a story and give a building greater context.

Pay Homage to a Structure's History

Every great photo tells a story—and architectural photography is no different.

To be able to effectively capture an architectural structure, it may be helpful to understand its history, meaning, and any interesting features. This can help you understand what is special about the building and help you capture a more interesting image. The more you know about the structure, the easier it is to help tell its story with your photos.

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Pay Attention to Your Lines

There are going to be a lot of lines when shooting buildings, so make sure they're filling your frame how you want them to.

It might sound simplistic, but it can actually be pretty tricky. For example, parallel lines can start to converge if you aren't careful, and it can make a building look like it's falling or distorted.

So how can you keep lines in check? Some effective ways include putting some distance between you and the building or trying out a tilt-shift lens. Either way, make sure you are following your lines when you shoot so you can capture your building how you want.

Give Details Their Due

One of the things that really separates everyday pieces of architecture from architectural works of is detailing. There are so many great details in architecture, and they can provide many unique opportunities to showcase these intricacies in the frame of your photo.

While you may want to try to fit the whole building in the frame, don't be afraid to go in close-up to take some shots as well. These underappreciated little details are what make buildings unique, and they can make for great photos.

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Play With Equipment

If you want interesting photos of architecture, get a little creative and play around with your equipment. Here are some ideas:

- A wide-angle lens is thought by many to be a must-have for architectural photography and is great for interior spaces. If you are shooting in low-light conditions and want to make sure that the details of the photo can still really pop, considering bringing a tripod along with you.

- Drones are also becoming popular options for people who are taking architectural photos as they can provide unique angles that the standard photographer simply won't be able to capture.

- A fish-eye lens may give off a unique look, but it is a powerful tool that you can use in order to capture the building and its surrounding environment.

- Filters can also be fun when shooting architecture. A polarizing filter is a must-have for all types of photographers, and is one that you should already have in your bag. Use this common filter in order to add contrast and make your images more vivid.

Take Your Time

Some photographers have the odd habit of rushing when they are shooting architecture. Don't worry: the light and elements may change, but the building is staying put, so take your time!

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Walk around, play with angles, and explore the changing light. Every great architectural photographer will tell you that you can't rush perfection, and while it may seem like you're taking the same photo over and over again, you may be delighted by the subtle differences in the results.

Play With Post-Photography Software

Architectural photography is one type of photography that can really benefit from some post-photo editing. Color correction, sharpness and increasing contrast are all little changes that can make a big impact.

It's worthwhile to invest in a high-quality photography software program and play around with different effects to enhance your photo and create a stunning final image.

Give Black and White a Try

Sometimes shooting in black and white can seem contrived, but architectural shots are a definite exception. Shooting in black and white can help create visual intrigue with architectural elements, especially buildings with sharp lines or high contrast details. It also contributes to the timeless nature of architecture, and helps create an artistic, moody look.

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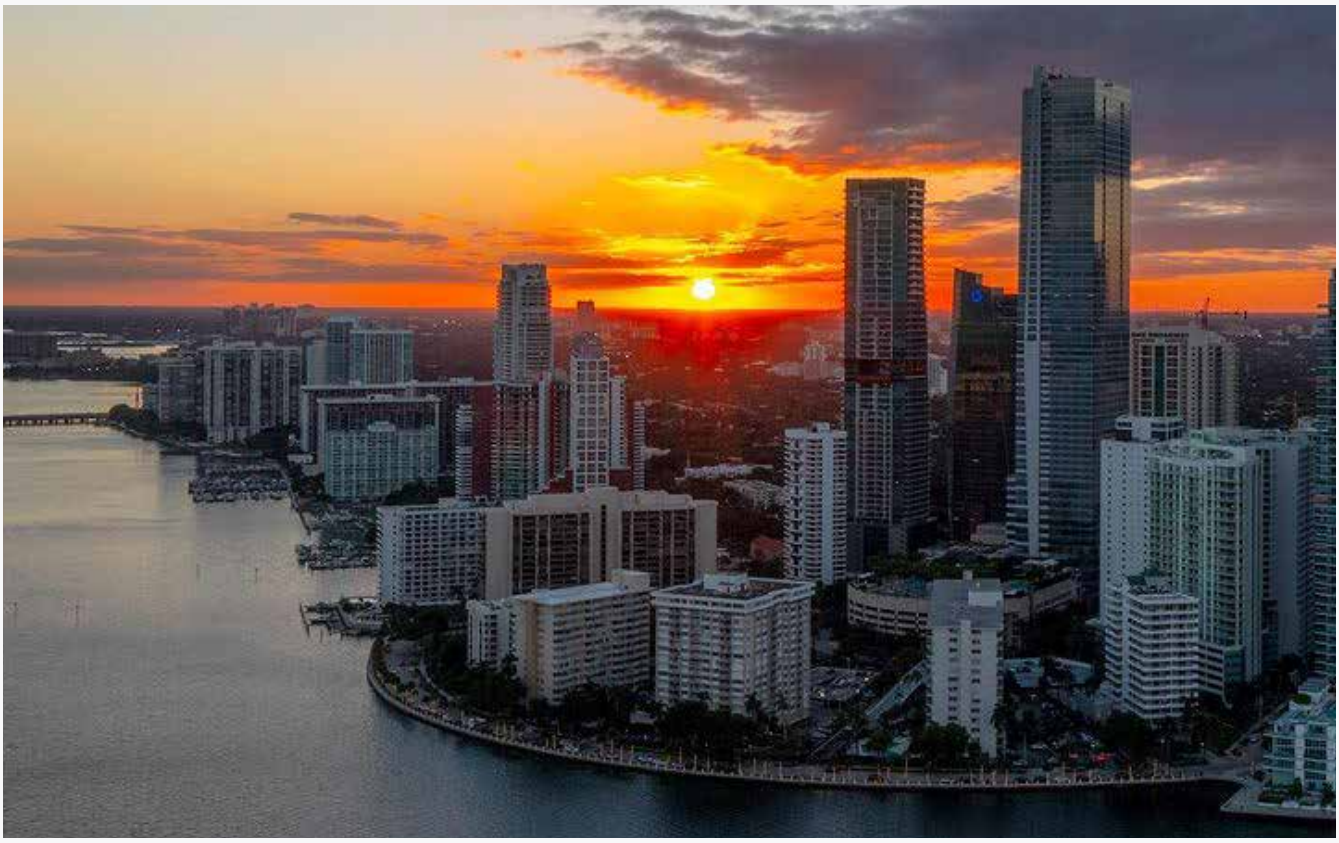
Real Estate Photography



Real estate photography typically isn't the first thing that photographers think of as a potential career path. However, this very specific style of photography can prove both regular and profitable, so it's well worth exploring!

There are many photographers who have forged substantial full time careers out of real estate photography, and many others who have used this skill for part-time supplemental income.

Real estate photography takes a little time to get used to. It's not necessarily a style of photography that relies on artistic angles, but rather on maximizing the property in front of you to make it look its best. So you'll have to get creative in different ways with this style of photography.

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Tips For Taking Great Real Estate Photos

Shooting real estate photos is different than shooting most other types of photos. Here are some things to know before exploring this niche of photography:

Be Goal-Oriented

Real estate photography requires a specific mindset. Your goal isn't to be creative or "arty" with these shots, but rather to market and sell the home you are photographing. This requires a different type of creativity than capturing a watercolor wash sunset or natural elements.

Making the house look as big and beautiful as possible is your focus. You want to showcase the best parts of the home, highlight the best features and do your best to make everything seem desirable.

Equipment for Real Estate Photography

What should you bring with you when shooting real estate photography? Here are some key tools to use:

Camera: No matter how great of a cell-phone you have, you should always shoot your photos on a professional-grade DSLR.

Wide angle lens: This is a great way to capture wider shots and get more of the home into your photos. It also gives more depth and detail to a shot. After all, you want to make the spaces of the homes you are promoting to seem bigger and more grand. However, do not use a fisheye; the warped look can be confusing and misleading.

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Tripod: A tripod can be your best friend when it comes to getting sharp, detailed photos in natural light. After all, most homes look their best when they are shot in natural light. Your tripod will help you shoot at slower shutter speeds and take advantage of natural light, all while delivering sharp images.

Light Stand: A light stand can really help light up a room and make sure you have the right flash and lighting—no matter what is in the space and what you are trying to highlight.

Setting the Scene

You want your photos to be evocative and make people wish that they lived in this house. While the realtor or homeowner should have already staged things for you, don't count on them doing it perfectly. Since the photos are a reflection of your work, here are some things to keep in mind before taking photos:

Clutter is bad. Clutter will not make any home look its best. Do your best to crop out areas of a room that look distracting or cluttered, and do your best to keep everything looking balanced, clean and tidy.

It can be a tough job for some homes, but remember, as a photographer, it is your job to pay attention to these details and get the best shot possible. This includes paying attention to little things, like:

- **Cleaning off the counters**
- **Removing clutter from the fridge**
- **Hiding paper towels, sponges and soaps around the sink**
- **Putting the toilet seats down**

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- **Cleaning off and dusting mirrors**
- **Clean the windows and remove distracting screens**
- **Hiding toiletries in the shower**
- **Making sure all of the light bulbs work and that they are consistent with the light fixture**
- **Removing old towels from the bathroom**
- **Picking up clothes off the floor**

Maximize window views. Taking pictures with the windows wide open is a great way to make a space look open and beautiful. However, make sure that you are looking out those windows and think about what is there. You don't want to take a photo with the window open and a large bush blocking your view.

Add some color. If your photos are looking dull, then you may want to add a pop of color to really make them attention-grabbers. This can be something as simple as a decorative blanket or a vase of flowers.

Look for key features. A great way to make sure you are taking an appealing shot is to look for the best feature in every room. Maybe it's a vintage-looking shower, a built-in bookshelf, or a fireplace. Use this unique feature as your focal point. Emphasize that one thing and the rest of the photo will come together.

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Capturing the Perfect Shot

Here are some tried and true tips for effective real estate shots:

Use landscape orientation. These photos always end up looking bigger and more pleasing. There is a recent trend of trying to shoot vertically for cell phone viewers, but you should always try to shoot in landscape when possible.

Don't forget the exterior! A lack of exterior shots can make potential home buyers suspicious that there's something wrong. So don't forget to take them!

Outdoor shots at dusk FTW. Shooting at dusk is the best time to get dramatic results for your photos—especially with exterior shots.

Shoot from the corners. Stand in the corners so that you can get as much as possible in the shot, but make sure that it is actually making small spaces, like small bedrooms look bigger.

Think about a lead photo. There needs to be one photo that stands out--think of it as the house's equivalent of a profile pic on a dating app. Choose one that highlights its best assets!

Think about lines. Crooked lines will make your real estate photos look unprofessional. Your vertical lines should be vertical and your horizontal should be horizontal.

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Use exposure bracketing. When shooting exteriors of a home, use exposure bracketing. This gives you a range of options to choose from so that you can find an exterior shot that really works.

Little tips like this can help improve the overall quality of your photos and help your images look professional, so you can book even more gigs. Start by practicing in your own home, so that you can perfect the skill and tweak your efforts to make sure you are creating marketable, professional, clear and clean photos that every agent you work with will love.

Mistakes to Avoid When Shooting Real Estate Photography

Most people don't notice really good real estate photos, but they will definitely notice really bad ones. These are some of the most common mistakes that novice real estate photographers make, and how you can avoid these mistakes with your next real estate shoot.

Don't photobomb yourself. Make sure that you check the background, so you aren't appearing in the photo. This is especially true when shooting in bathrooms. You don't want to give your client photos where they can see you taking a picture in the bathroom mirror.

Don't over-edit. Over editing and adding filters and coloration can be great with certain photos, but if the images don't look natural, they aren't going to translate well for realtors.

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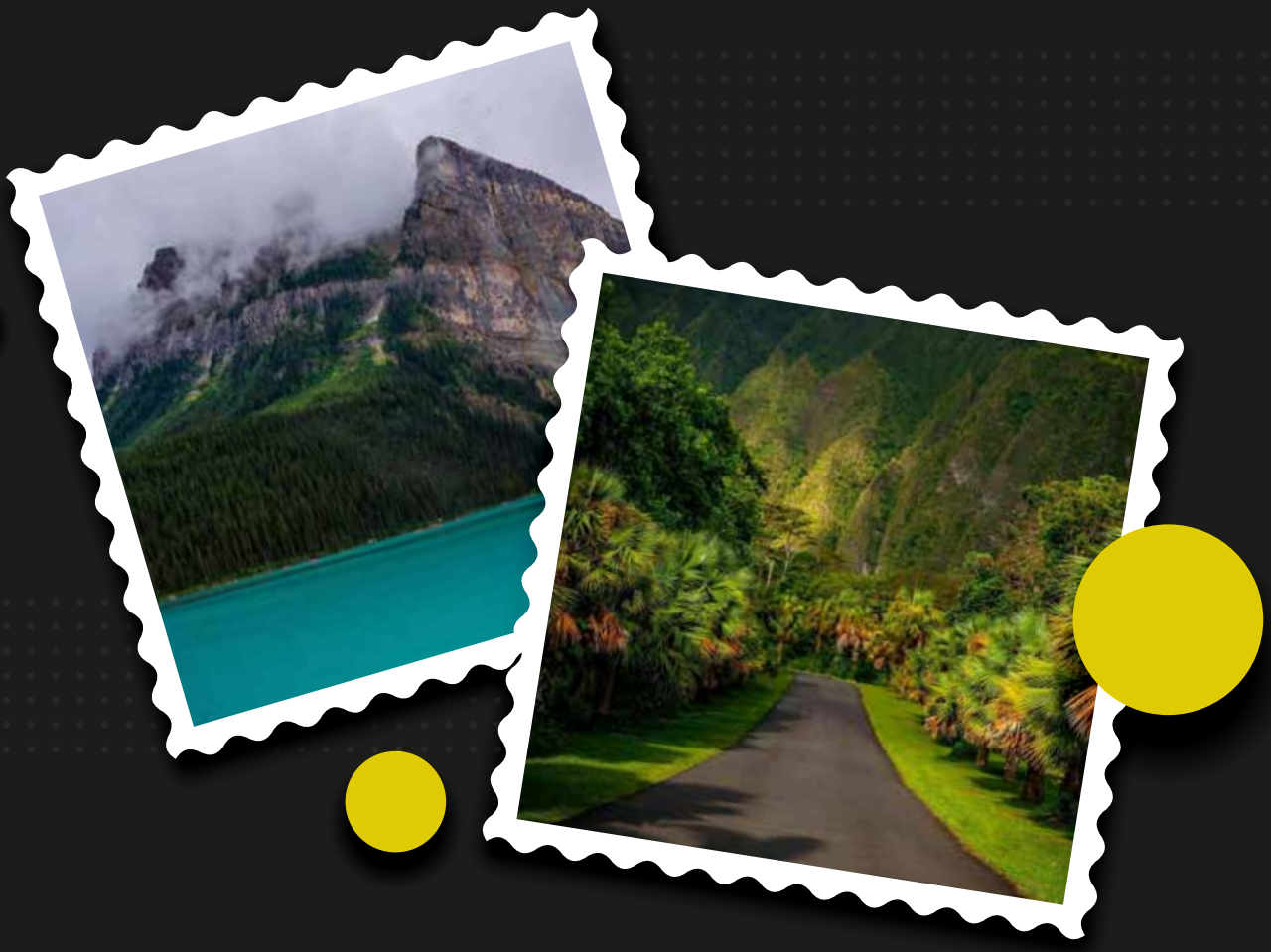
Don't take too few photos. Nothing will irritate a client or a realtor more than finding out you didn't take enough photos and that you need to get back into the house to reshoot. Chances are they set up the house for this photoshoot and no client is going to want to go through that again.

Don't keep the blinds closed. Most photographers know that great shots are all about lighting. However, when it comes to shooting real estate photography—there is one major lighting rule to keep in mind: you should always keep the blinds open. Closed curtains or blinds will only make the space feel cold and dark. Let natural light in, it will make the space look better.

Section 2

Landscapes and Nature



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"The picture that you took with your camera is the imagination you want to create with reality."

Scott Lorenzo

Natural elements are some of my favorite fodder for photography. It's incredible what you can witness in the great wide world, from rushing waterfalls to desert landscapes and snowy forests.

Sometimes, these phenomenon can seem incredible in photographic form--people often ask me where these places are because sometimes they look like alien landscapes.

Photographing the elements offers the chance to escape into nature and to create a brave new world with your images. So go ahead...bravely venture where nobody else has gone, and be sure to bring your camera!

Landscape Photography for Beginners

Landscape photography is a relatively general term used to describe taking pictures of different types natural landscapes. It doesn't matter what type of landscape, whether it is rolling grass fields, a beautiful beach or a majestic mountain.

Landscape photography can include wildlife, inanimate objects or even people in the subject matter—or it can just be of nature as it is with no other inclusions.

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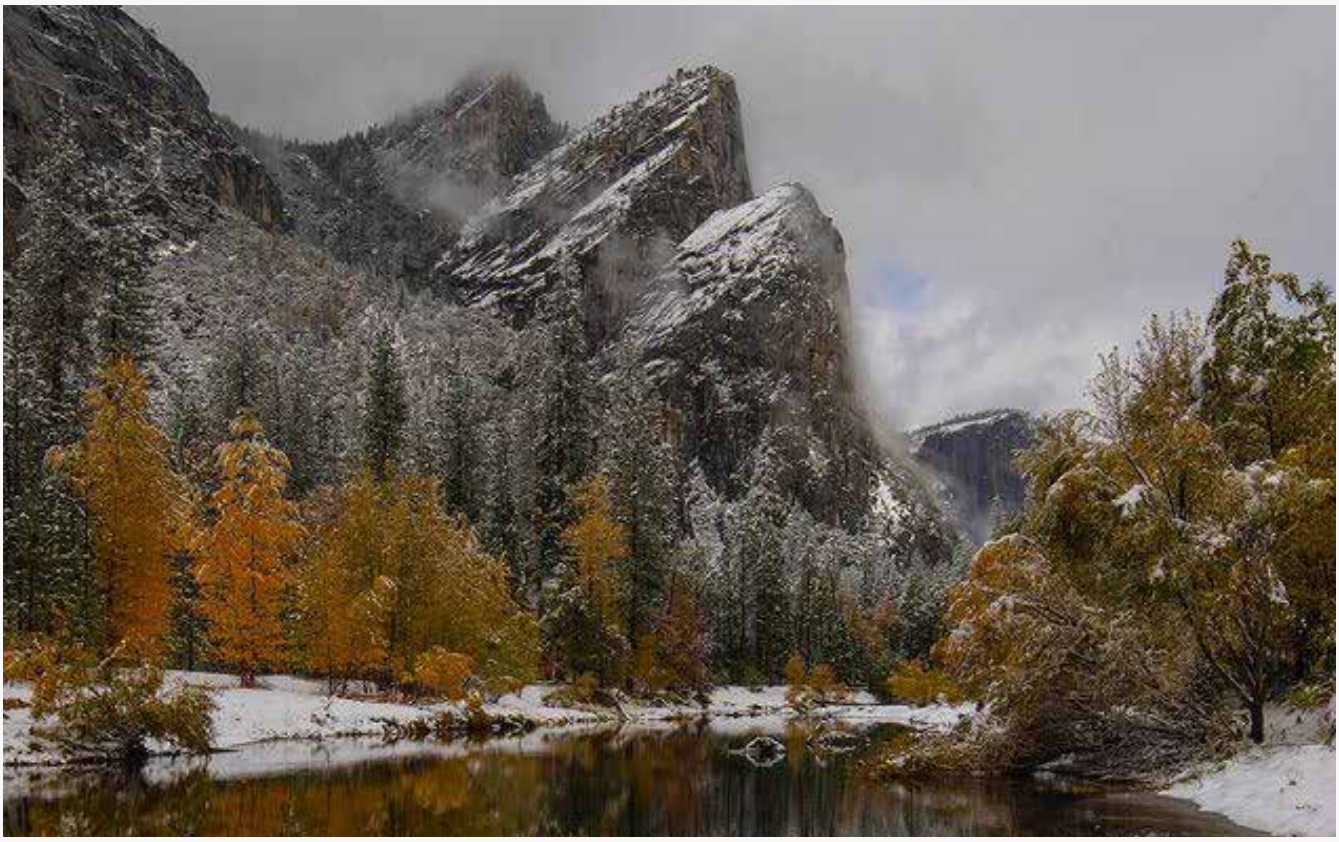

No matter what type of landscape photography you are shooting, it is important to remember is there is a lot that goes into these types of shots before you ever actually click the shutter.

Before You Get Started

The most important thing for beginners to remember when shooting landscape photography is that your goal should be to try to capture the landscape in front of you in its most natural form.

There are so many different filters and post-editing features you can add to photographs, but you don't want to rely on those in landscape photography. After all, your attempt is to capture nature as you see it. So, focus on the basics of taking great photos and worry about editing and fancy features later.

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Cameras for Landscape Photography

There are certain types of photography where you can get away with shooting images on a sub-par camera. Sorry, landscape photography isn't one of them While smartphone cameras have improved tremendously over the past few years, they are not sufficient for landscape photography. An actual camera has larger and better sensors and more settings that allow you to customize your shot more and get the awesome final product you are looking for.

You need to have a good camera in order to get really crisp, beautiful landscape shots. The two most ideal cameras for shooting landscapes are DSLR and mirrorless cameras.

Lenses for Landscape Photography

In addition to a good camera, when shooting landscape photography, you will also need a good lens. Start with a quality lens that pairs with your camera, and make sure that you also get a wide-angle lens.

This is a must-have for landscape photography as it offers a wider perspective and allows you to capture more of the scene. Some avid landscape photographers even go with ultra-wide-angle lenses which are shorter (such as 24 mm) and give you even wider shots.
There are a few different types of wide-angle lenses, so make sure that you play with different options before choosing one.

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5 Landscape Photography Tips

Here are five essential tips that will take your landscape photos from ordinary to extraordinary.

1. Follow the Rule of Thirds

The rule of thirds is one of the first things that are taught in photography classes, and for good reason—they can help create a balanced photo and teach you how to frame a shot.

Here's how the rule of thirds works:

- Imagine that your photo is broken down into a grid of nine equal rectangles.
- Place the subject of your photo on one of the four intersections of these rectangles.

This gives the photo a more natural look, when compared to putting the subject right in the middle of the screen. This isn't necessarily a hard and fast rule, but it is a great standby to return to, especially if you start to feel like your images look too staged.

2. Perfect the Exposure Trifecta

The rule of thirds is one of the first things that are taught in photography classes, and for good reason—they can help create a balanced photo and teach you how to frame a shot.

Here's how the rule of thirds works:

Getting proper exposure with any shot is essential, but tricky. It all comes down to balancing the three things that make up the exposure trifecta: shutter speed, aperture and ISO settings.

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- **ISO:** The ISO refers to how sensitive the sensor or film is to light. For darker situations, you need to use a higher or more sensitive ISO setting to capture light (like 800 or even 1600). However, higher settings bring more noise into the image, so if you don't need the extra light, don't overdo it with the ISO.

- **Aperture:** This term is used to describe the size of the opening in the lens diaphragm. Smaller aperture numbers mean a larger opening, but more shallow depth of field. Larger aperture numbers mean a smaller opening (and less light) but sharper images.

- **Shutter speed:** As the name suggests, the shutter speed refers to the amount of time that your camera's shutter is open and the amount of time your sensor or film is exposed to light. A fast shutter speed will stop motion, while a slow shutter speed will capture blur and movement.

While beginners may want to start off in automatic or priority mode, if you really want full control of your camera and your photos, you need to switch to manual and learn to balance this trifecta properly.

3. Have Your Camera at All Times

When it comes to your camera, let this be your guiding rule: never leave home without it.

You never know when you will find inspiration for a shot or see something that needs to be captured in an instant. Sure, it might be a hassle to carry it around at times, but the feeling of regret you'll experience when you miss the perfect shot is a million times worse!

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4. Embrace The Histogram

Histograms are one of the staples of any modern piece of image editing software. They can also seem complicated to new photographers, so let's take a moment to talk about what they have to offer.

A histogram is a graphical representation of the tones in your image—or the amount of tones in a particular brightness, ranging from black (0% brightness) to white (100% brightness).
Histograms also usually display information for the three primary colors (red, green and blue). Take the time to take a tutorial on histograms. The graphs may seem complicated at first, but they will ultimately help you with your editing.

5. Composition Matters

It can be really easy to get caught up in the artistic value of a photo, or in messing with the lighting and the manual settings on your camera. One of the negative side effects? Sometimes, you forget all about composition. Don't do this!

You can't go back and change the composition later on, so pay close attention to your composition while you're in the moment.

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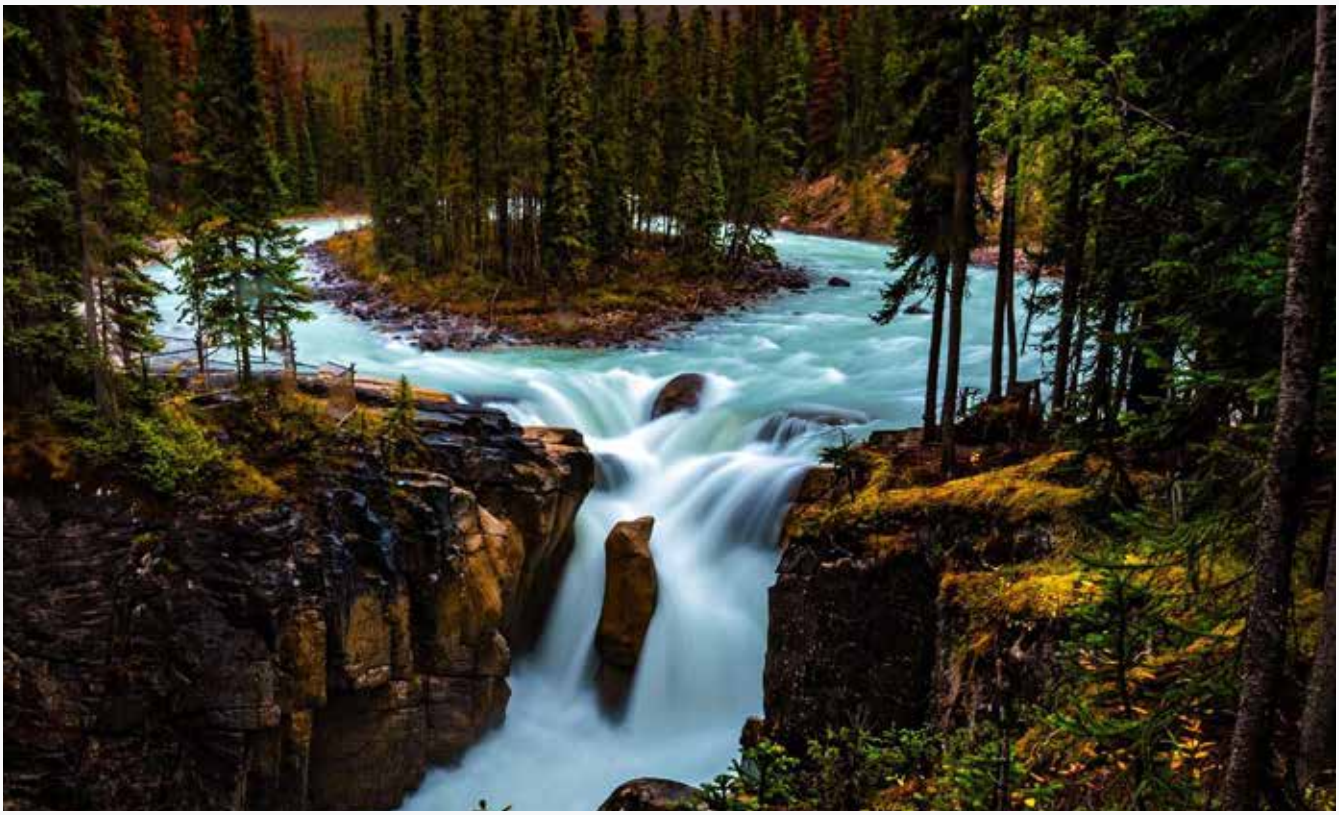
How to Photograph Waterfalls



Waterfalls always have been and likely always will be a popular landscape photograph subject. However, capturing the majesty of a waterfall can prove tricky: if you don't set up your shot right, that powerful rushing water can just look like a confusing blur.

Learning how to photograph waterfalls can help you create beautiful photos, but it will take a little practice and patience.

There are a variety of different approaches to photographing waterfalls, and ultimately you'll need to find what works best for you. However, that being said, there are some tried and true tips that can help ensure reliably good results.

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Take these tips in to account when you're setting out on your next photography outing to help you get started. Feel free to adjust or make changes based on your developing skills and preferences!

Gear

The right camera is essential to shooting waterfalls. Happily, it doesn't need to be a specific brand: you just need a camera that can shoot on manual. That's it.

There are many people who think that neutral density filters are essential for photographing waterfalls, but they really aren't. They can actually make the photos worse.

The thing is, when you put a neutral density filter on your lens, it can counteract with a still sun. This is especially true if you are shooting with direct overhead light. This can give you "hot spots" and dark shadows that will take away from your final results.

Another thing you definitely need is a tripod. This will help you if you want to actually be able to see the water running. When looking for a tripod, make sure that you invest in a sturdy, heavy-duty tripod that can withstand being out in the woods.

Timing and Location

When shooting waterfalls, it's important to consider the time of day to get the best shots. In general, the best times lighting-wise will be at sunrise or sunset.

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Mid day, when the sun is at its brightest and casts harsh, flat light, can create unnecessary contrast that can be distracting in your shots. The exception? Cloudy days, when the light is gentler.

Of course, the actual location can affect the light, too. Many waterfalls are located deep in canyons, which means the sun will mostly be blocked, and the waterfalls will mostly be in the shade. This gives you the opportunity to shoot with a long exposure that will deliver nice, even lighting.

The direction of the waterfall matters, too. If you're shooting a waterfall that is facing east, shoot in the late afternoon instead of the early morning, to prevent the light from catching right on the falls. If you are shooting a waterfall that faces west, shoot it in the early morning.

Exposure

Exposure is one of the most difficult components involved with photographing waterfalls. The exposure is what keeps the waterfall from looking like a blur, especially when trying to capture the power of a raging, fast-moving waterfall.

Manual settings are key; here's how to get your camera waterfall-ready:

Use a Small Aperture

A small aperture helps keep everything in sharp focus. It can also help you get a longer shutter.

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Depending on your shot and the conditions, you may need to tweak the aperture, but you should start with f/16 then go smaller if you don't have a slow enough shutter.

You may need to go really small, but don't just always use the smallest aperture possible, otherwise you may lose some sharpness in your image—and you need this to capture any waterfall.

Use a Slow ISO Speed

Set your ISO on your camera as slow as it will go. Typically, this is around 100. Remember, lower ISO speeds produce less noise, and since you're using a longer shutter speed, you will need this to cancel out any noise. This will also help you capture a more dynamic range with your shot.

Shutter Speeds

Determining the right shutter speed when photographing a waterfall will require experimentation. To start, try a shutter speed of two seconds, but note that you may range anywhere from 1 to 30.

Take a test photo and if you find you are losing a lot of detail in the shadows, then try a slower shutter speed. If you are losing details in the highlight, then tr a faster shutter speed.

If there is not enough blur in the photo to showcase movement, then you want to slow down the shutter speed.

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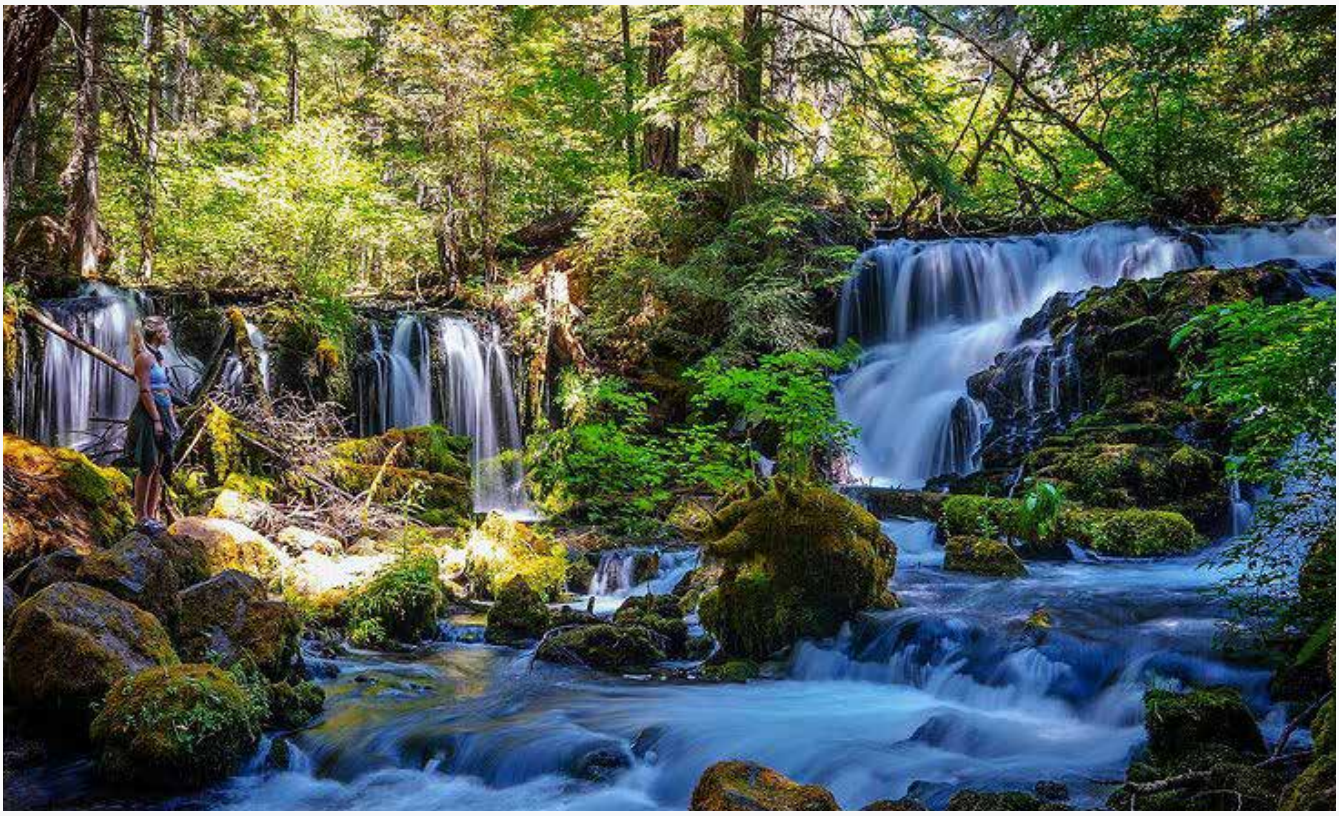
Lenses

Take both wide-angle and telephoto lenses with you when you go to photograph waterfalls. Remember, you don't want to get too close to the waterfall, as the water backsplash can damage your camera.

A telephoto lens will help you photograph from a distance, and a wide-angle lens will work if you are trying to capture smaller waterfalls.

Composition Tips for Shooting Waterfalls



Take a little time to think about your desired composition before you start snapping away. Here are some composition tips to consider:

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Try shooting at an angle.

Instead of positioning yourself directly in front of the waterfall, try it from an angle. Just look at any great image of a waterfall and you will see how dramatic of an effect this can have!

Consider cropping.

Don't stay committed to the idea of shooting the entire waterfall and the surrounding area. Consider zooming in with a telephoto lens and capturing one small area of the waterfall. It can result in a unique composition that delights viewers.

Don't forget about the foreground!

The trees, rocks, flowers and other natural elements in the forest provide a great contrast to the rushing waterfalls.
Look down. Consider framing the waterfall with a foreground and completely removing the sky from the frame. Sometimes, too much sky can take away from the drama of the waterfall, especially if they are similar colors.

Try a mid-range zoom.

Experiment with mid-range zooming between 24-70mm to take images of portions of the waterfalls. When doing this pay close attention to your composition.

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Try to indicate scale.

Scale can be hard to capture on photos of waterfalls. Including people in the shot can really show the scale and power of a waterfall.

Fiddle with filters.

While photos without filters are typically preferred, if you want to try the ND filter so many people swear by, note that it is going to smooth out the look of water. This can be effective in certain cases, but usually shooting without is best.

Side bar: The 5 Most Photographable Natural Parks in the USA

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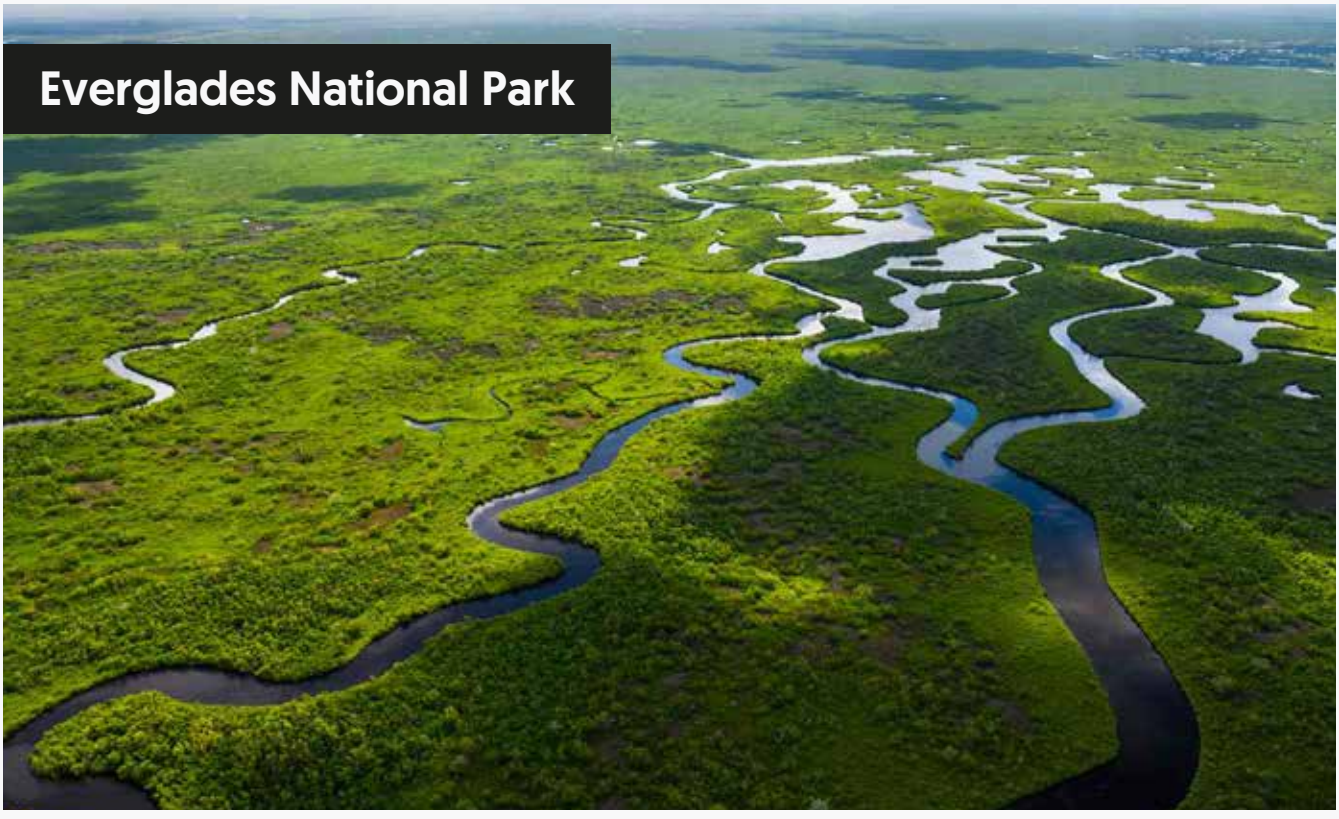
The 5 Most Photographable Natural Parks in the United States

Love to take photos of nature but lack the means to travel across the globe for the most stunning shots? Good news: there are plenty of gorgeous spots right in the USA to take stunning nature shots.

The US is home to dozens of stunning natural parks that not only make for a memorable experience, but can provide a truly unforgettable backdrop for your photos.

Of course, finding the right location is only half the battle. As any photographer knows, once you find the right scene, then the real work begins.

Here are five of the most photogenic natural parks that you can find right here in the United States—happy shooting!



Section 2 - Landscapes and Nature

While many think of amusement parks and beautiful beaches when they hear about Florida, the Sunshine state is actually home to one of the world's most breathtaking natural parks.

Everglades National Park is a protected park representing the southern 20% of the everglades in Southern Florida. It's the largest resource for tropical wilderness in the USA.

If you are a fan of unique landscape photography or of bird photography this place is for you.

The Everglades National Park is filled with native wildlife, particularly herons, pelicans, cranes and storks. One of the great things about these birds is that they are so approachable and used to humans being around that it makes taking really unique photographs a breeze.

The still water of the everglades almost acts as a mirror reflecting the unique marsh lands that are filled with trees, moss and swamp landscaping that truly can't be found anywhere else. Plus, the mist and fog that seem to endlessly inhabit this national park will give your photos a unique mood and plenty of drama.

If you want a really special shot, make sure that you head over to Nine Mile Pond, it is a favorite spot for local alligators to hang out and it makes for stunning photos of the real local wildlife.

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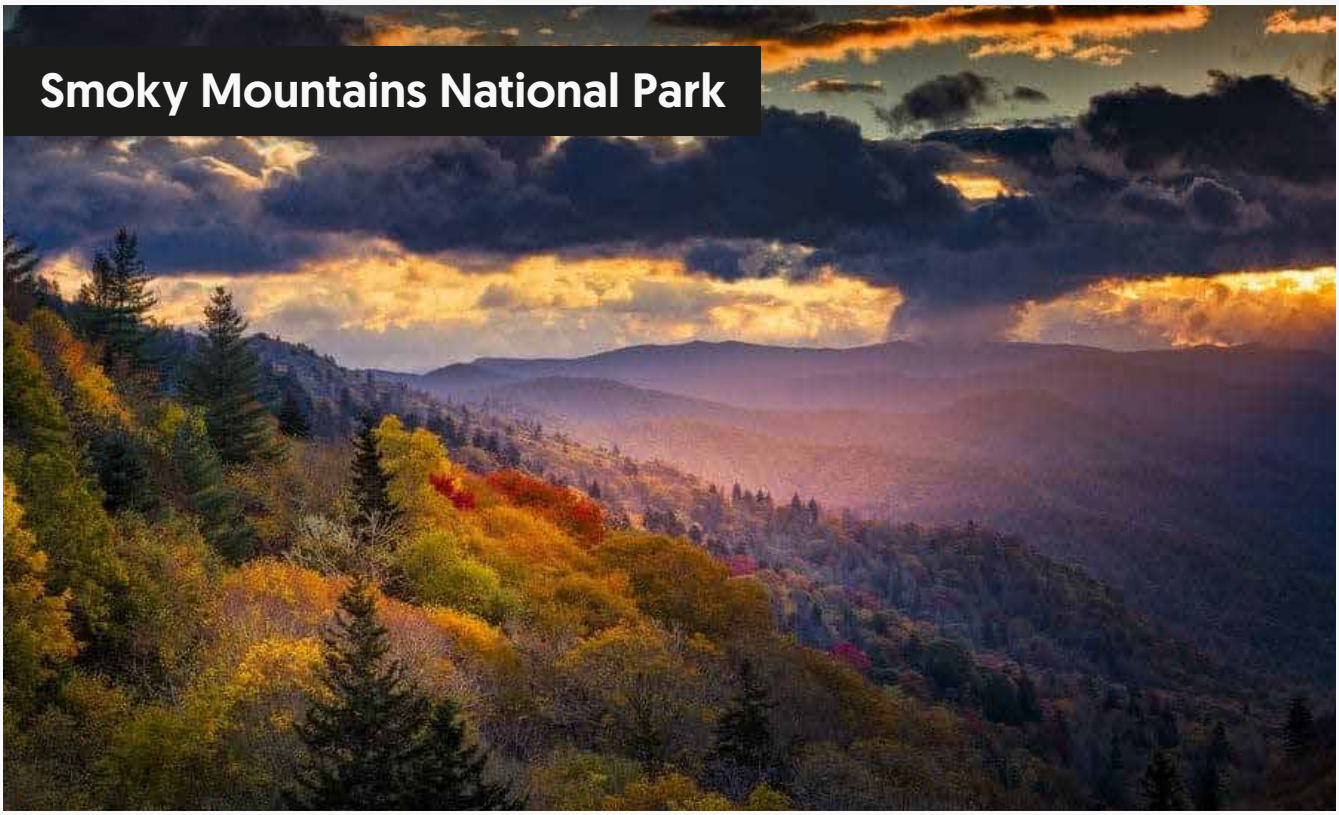

This massive park is one of the biggest draws of the eastern portion of the United States and is filled with stunning forest landscapes and wildlife, including a variety of plants. In fact, this natural park is home to more than 1,500 flowering species, 200 birds and 60 different types of mammals, so if you enjoy taking photos of wildlife this is the place to go.

As you walk through this famed national park, you will see waterfalls, flowers and stunning forest colors that make for really rich and beautiful photographs. One of the best times of year to photograph in this park is the fall, when vibrant foliage abounds in every direction.

Here's a great bonus for photographers shooting in this region: there is almost always a slight cloud coverage or light mist (hence the name smoky) which helps deliver the perfect lighting for your shots.

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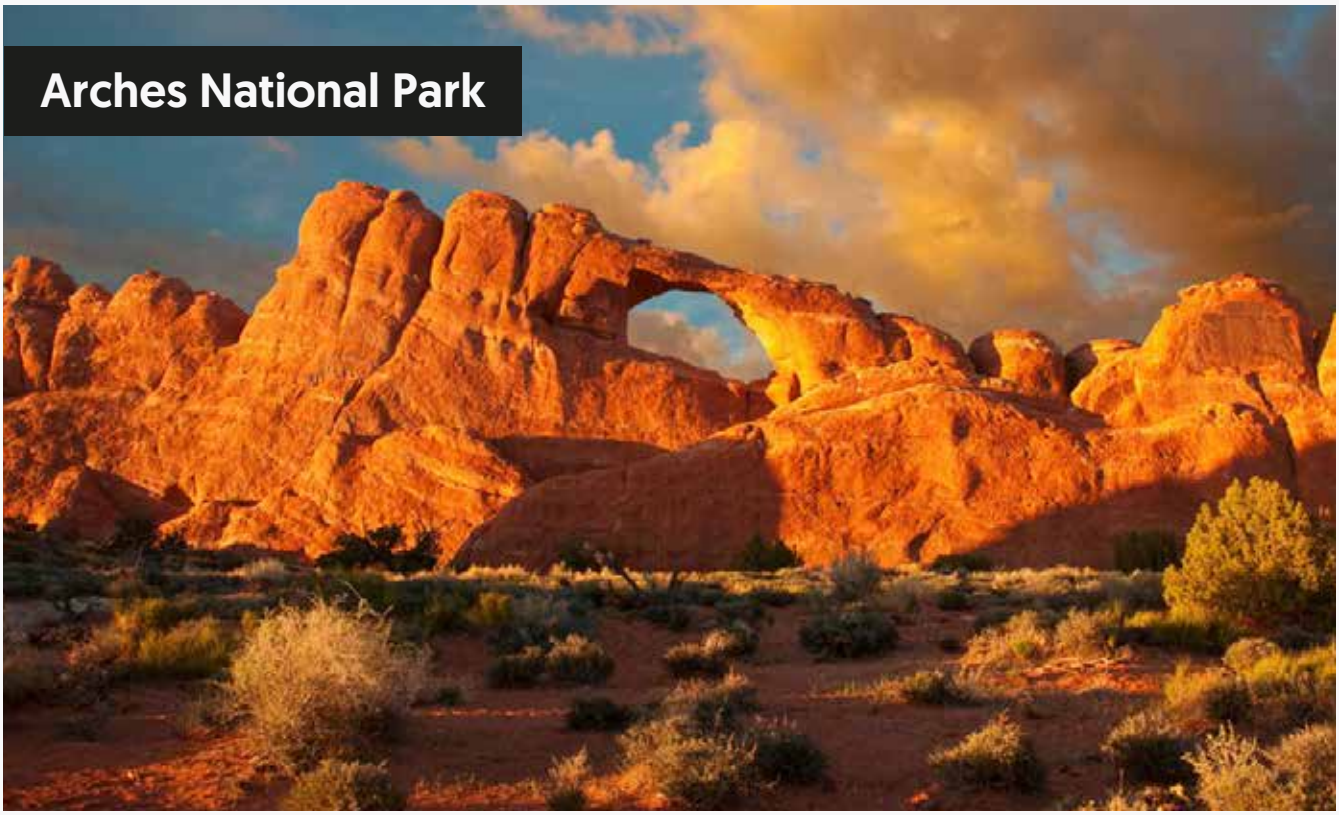
Mount Rainier National Park is fairly isolated, but once you get there you won't even believe you are in the United States anymore.

This park makes up the largest mass of permanent ice in any of the lower states and it is complete with 25 major glaciers than span more than 100 miles. In the later summer, you can see wildflowers blooming in the meadows along the base or you can explore the ice caps for cool, crisp photos.

A true photographer's dream, the unique landscape of this national park has created several environments ranging from rain forests to ice peaks and including everything from streams and rivers to reflecting lakes and waterfalls. This means, no matter what you are looking to shoot, chances are you can find it in this stunning national park.

If you really want to capture one of the true wonders of this area of the world, make sure to capture a photo of the cloud crown that forms along Mt. Rainier, the park's namesake--it is truly something that must be seen to be believed.

Section 2 - Landscapes and Nature



Utah's Arches National Park should be on every photographer's bucket list. This park is a true photographer's dream, boasting the world's largest collection of natural stone arches--over 2,000 different arches can be found around the park.

These arches provide seemingly limitless photographic fodder, allowing you to create interesting frames and accents for the beautiful mountains and canyons that surround the park.

If you prefer living landscapes, there are plenty of opportunities to get up close and personal with the area wildlife including lizards, wildflowers and desert animals.

Just make sure to bring a reflector: this park is in the middle of the desert, which means little shade and harsh light. But it's worth it: this otherworldly park will help you attain photos that are truly out of this world.

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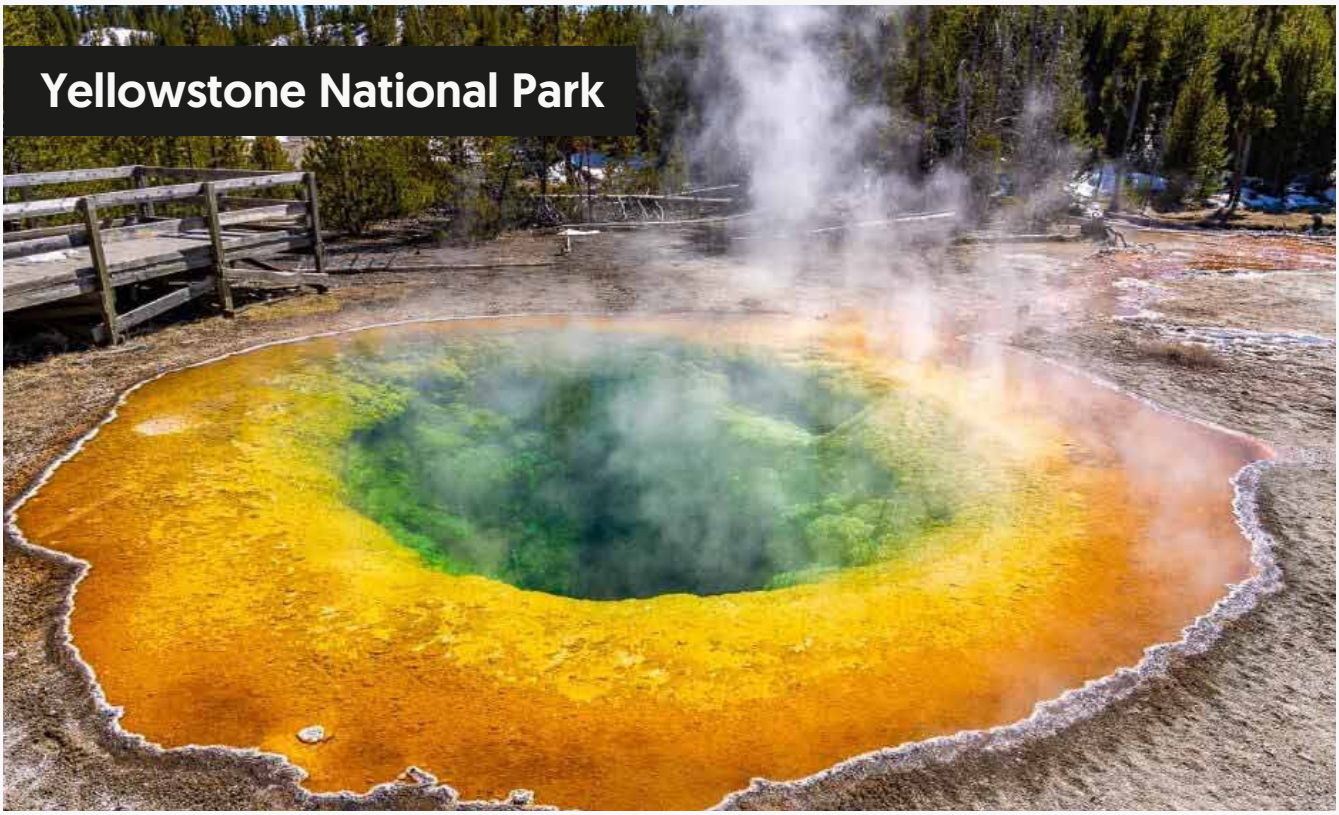


The nation's first national park is still one of the best! While some might dismiss this park as overshot or overly commercialized, it's far from the case.

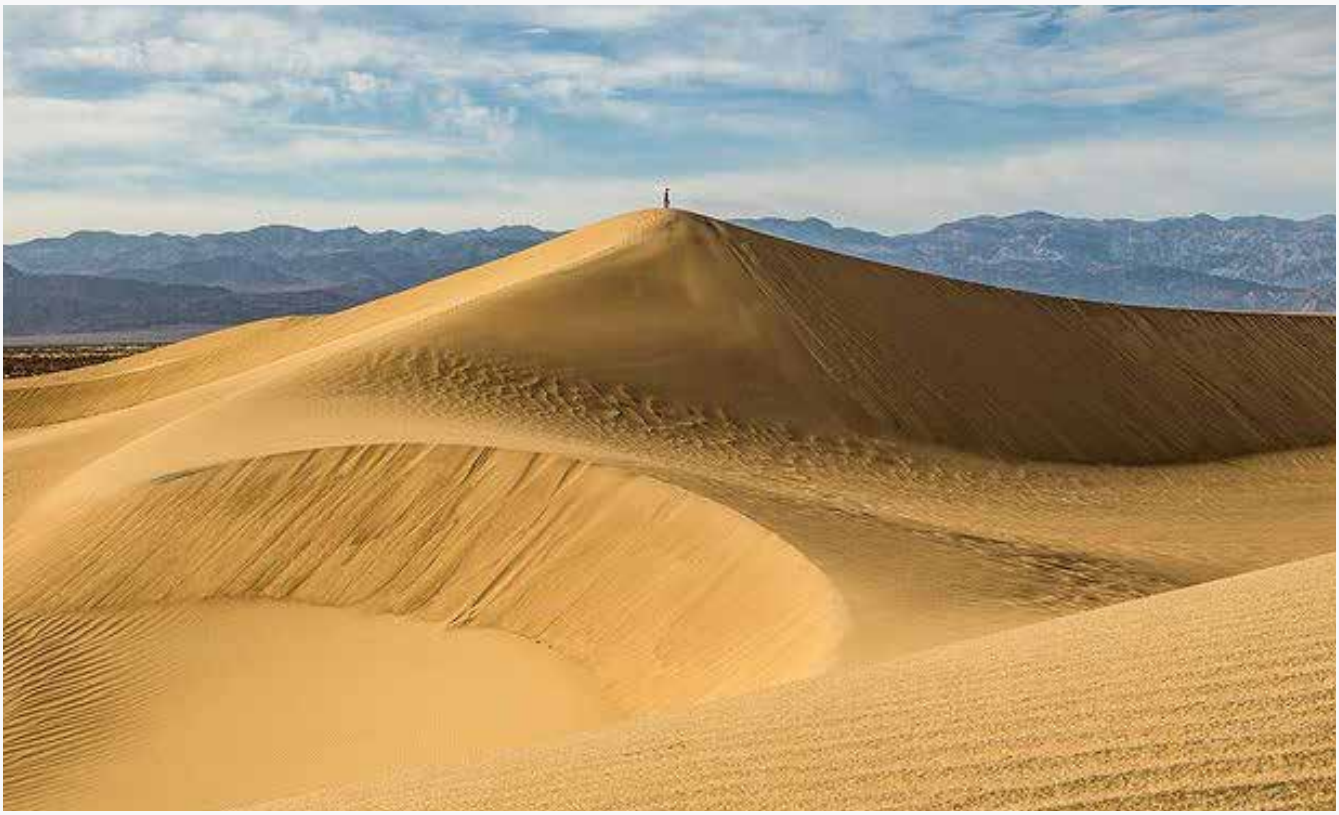
The hot springs and geysers provide a once-in-a-lifetime photo opportunity, while everywhere you turn there are new rivers, waterfalls, lakes and canyons to inspire your next shot.

For photographers who are just as into wildlife as you are landscapes, Yellowstone is filled with one of the most diverse collections of animals when compared to any other national park. Elk, bison, coyote, swans, moose, sheep and antelope all call this park home.

While the park can become saturated with photographers, you'll find that it's worth contending with the crowds once you review the photos that you've captured after a few days in Yellowstone.

Section 2 - Landscapes and Nature

Desert Photography Landscapes



Different geographical conditions require different photographic approaches. While there are some general principles that apply to all landscape photography, each setting requires its own unique approach and has its own unique challenges. This is particularly true when it comes to photographing desert photography landscapes.

Shooting photos in the desert is extremely unique—there is no other type of landscape that delivers the same types of colors or the same type of skylines.

This means that if you are planning on photographing desert landscapes for the first time, there are a few things you need to be aware of—no matter how experienced you are with general landscape photography.

Here are a few important tips that can help you photograph desert landscapes so you can get some truly breathtaking photos you are sure to cherish.

Section 2 - Landscapes and Nature

Desert Photography Gear

Much like photographing virtually any type of subject, the key to great desert photography starts with having the right gear. Here's the equipment you will need:

Tipod

As a photographic subject matter, the desert is most compelling from dusk onward. A tripod will allow for long exposure times without the blur.

When choosing a tripod for your desert landscape photography, the rule of thumb is this: the sturdier the better. This isn't the time to use a lightweight tripod. For one thing, your tripod will need to be set up in sand--not the most stable ground. It will also need to be able to withstand high winds, so you want a little weight and substance.

Night Photography Gear

Some of my favorite desert shots occur after the sun sets. Shooting sunsets that merge into starry nights makes for really stunning photographs.

If you want to give it a try, be sure to stock up with night gear: a flashlight (consider a headlamp too), plenty of water and proper GPS equipment so you don't get lost. The desert at night can sometimes feel like walking into a dark cave! I myself have had many instances where I couldn't see 10 feet in front of me because it was so dark. Don't forget to layer up, too: the desert can be far colder at night than during the day.

Section 2 - Landscapes and Nature

A Variety of Lenses and Filters

There are so many cool ways to capture desert landscapes. Will you capture the rolling hills in the distance? Or, do you want to focus in on cacti in the foreground?

With so many options, you want to make sure you're prepared for a variety of different photographic directions. Make sure you bring a few different lenses—including wide angle and telephoto. You never know what sort of inspiration will strike in the desert, so it is always good to be prepared.

Filters will help you out, too. If you're shooting during the day, you'll definitely want to bring a UV filter to protect against that bright desert sun and a neutral density filter to help mellow that harsh light.

You may also find it fun to experiment with polarizers to darken light blue skies and to bring some depth to your shots.

Protective gear

Shooting in the desert means shooting in the sand—which also means that your expensive equipment is at risk for damage. Sand can scratch lenses, get in the crevices of your camera--in short, it can really take a toll on your equipment.

Take some proactive steps toward damage control: make sure you bring a lens cap, plenty of lens cloths, and airtight bags for all of your equipment to help keep the sand away the best you can.

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When is the Best Time of Day for Desert Photography?

As with any other type of landscape photography, the right lighting can make or break your entire shot in the desert.

Since desert daylight tends to be harsh and unforgiving, many photographers prefer to shoot desert landscapes in the evening, either at starting about 1.5 hours before the sunset sundown even later to capture the desert twilight.

Sunrise is also a good time for shooting in the desert, as it offers another great opportunity to capture those gorgeous desert sky gradients.

If you're shooting at sunrise, your perfect timing zone will be from right when the sun is coming up to about 1.5 hours after the sunrise.

If you are planning on shooting at night, you can also use lighting to help create silhouettes in the desert.

For example, a person can make a great silhouette in the desert if you play with your exposure: f/11, 1/125th ISO 100 is a great place to start.

It is typically best to avoid shooting in the desert midday. Not only are you going to have to deal with the heat, but it can be difficult to adjust your camera settings to accommodate the direct sun against the sand.

Speaking of the sand...if you are trying to capture patterns in the sand, you'll want to avoid shooting in the direction of the sun. Instead, have your back facing to the sun. The lighting will be more conducive to getting clear shots this ways.

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Don’t Forget to Capture the Sky

This may seem obvious, but forgetting about the sky in compositions is a common mistake that many people make when shooting desert photography landscapes.

Since there isn’t much in the desert really but sand and rocks, you need to make sure that you really capture the sky to put them in context and offer color contrast.

Using a polarizing effect can help give the sky a deep, rich shade. This will help your landscape really pop. Just make sure that you don’t illuminate only one part of the sky and leave the other park darker—the best way to do this is to photograph straight on, rather than taking angled shots.

Another tip for capturing the sky? Try High Dynamic Range (HDR). This will help you illuminate your photos accurately. The best way to do this is to take a few different shots at different exposures, while changing the shutter speed.

Tips on Desert Photography Composition

Composition can prove tricky in desert landscapes, because you want to capture the depth and beauty as well as the impressive scale.

While it can be tempting to use a wide-angle lens to capture as much of the vista as possible, it can also flatten your shots, reducing majestic sand dunes to little bumps in the image field.

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If you do decide to shoot with a wide angle lens, don't forget about the rule of thirds. Try to find some sort of point of interest in the foreground or the sky—even if it is just a plant or a pattern in the sand. This can help you desert landscape have some visual interest and help give you a sense of scale.

Capturing foreground and leading lines that end with a subject can create some great depth in your shots.

Telephoto lenses can also be a great option when it comes to desert photography composition. These lenses allow you to focus in on details, make your subject look larger in the frame and help giving it greater presence.

Elevate Yourself (Literally)

If you find that your desert landscapes are looking a little commonplace, get high! I mean that in the literal sense: find yourself some higher ground.

This is a great trick to making your desert landscapes really stand out. There are plenty of hills and mountains in the desert, and even the smallest change in elevation can really change the way your scene looks.

So go ahead, climb a hill, or on top of a rock or other elevated surface in the desert. It might just give you the unique camera angles you're looking for!

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Pay Attention to Lines, Patterns and Textures

Think outside the box when shooting in the desert. Instead of focusing solely on the big picture, look at all of the interesting naturally occurring lines, patterns, and textures that can be found in desert landscapes.

Going low can help you capture some unique textures when shooting desert photography.
Lines in the sands, cracks in the dirt, textures in the rocks and cactuses are all great places to find textures and lines you won't find anywhere else. Textures and patterns can be found on the ground, on the hillsides and in the sky.

Use the sun to your advantage to emphasize the texture in the desert. It can help create interesting tones and shadows that will really emphasize these lines and patterns.

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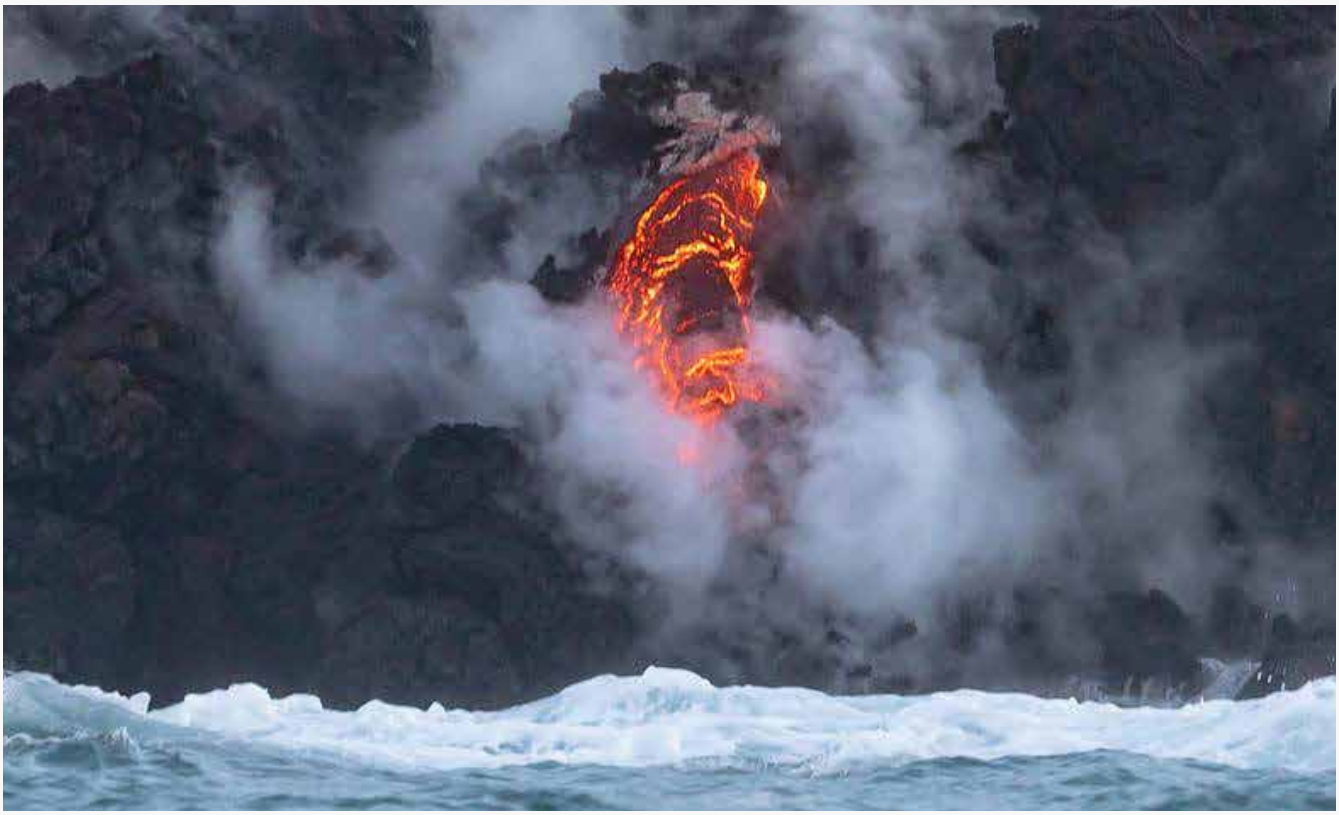
Lava, Volcanoes, and the Sea: Big Island Photography



Geologically speaking, the Hawaiian islands are comprised of some of the newest land formations on the planet.

The fiery outbursts of active volcanoes that have been seen on the Big Island over the past century are a testament to the relatively young age of the exotic Hawaiian islands. Most recently, the Kilauea eruption that lasted from April-August 2018 provided an amazing spectacle.

Lava flows, cinder cones, and new land formation may not be unique solely to Hawaii, but they remain a huge draw for people around the world. They also make for fantastic photography subject matter!

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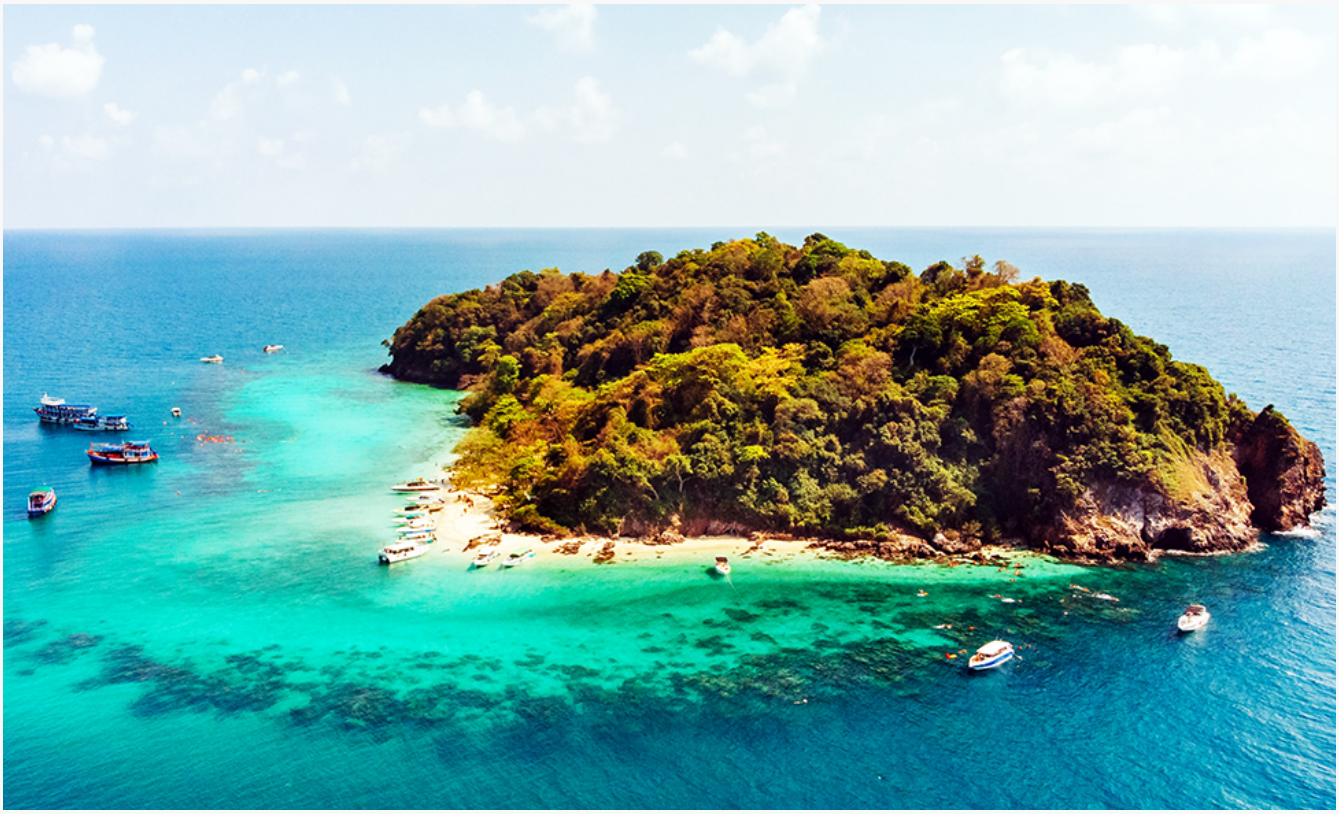
What to Photograph on the Big Island



There are countless things to photograph on the Big Island, but I am only going to focus on four particular topics that cover the diverse landscape of Hawaii:

- **Volcanoes National Park**
- **Mauna Kea Observatory**
- **Akaka Falls**
- **Kona Sunset Photography**

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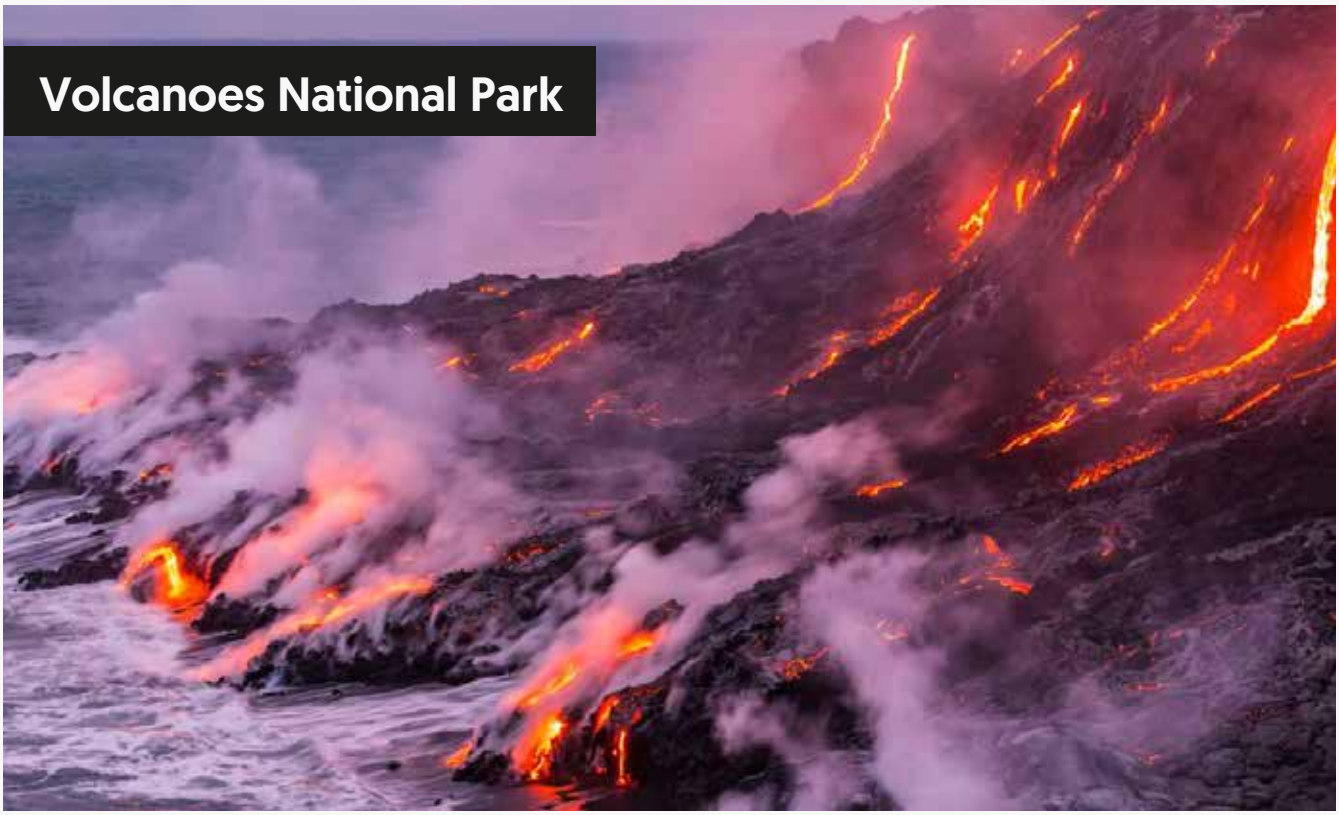

Volcanoes National Park is one of the biggest draws for most visitors to the Big Island.

The rocky landscape of the park is a testament to the tumultuous geological history of the Island. Until recently, it hosted the only open lava pit in the United States, bubbling with oozing lava for decades. Currently, it's asleep--no lava flowing.

Tips for Photographing at Volcanoes National Park

- Be aware: as of Fall 2018, the lava flow has ebbed and is no longer active.
- Be mindful of jagged rocks and surfaces.
- DO NOT enter areas that are restricted.
- DO NOT take volcanic rocks home — as legend has it, bad luck will ensue!

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By Sea

Approaching the lava areas by sea offers the biggest thrill. There are a number of chartered boats that will take you right up to the action.

During my visit, I took the Lava Ocean Tours boat from Hilo and had an incredible experience. During the peak of the lava flow, our boat took the 2 hour journey from Hilo to the shores of the National Park and witnessed one of the greatest spectacles: new land formation! We were also fortunate enough to see lava flows oozing into the ocean.

By Land

I wasn't fortunate enough to experience the beauty of the park from ground level due to the massive lava flows during the time of my visit. However, this is a great way to explore the many new lava tunnels that have formed over the years. If you go, be sure to check out how the Kilauea eruptive cone looks now that the flows have stopped.

By Air

If you want a more expansive look at the park that offers incredible views, chartering a helicopter is the way to go.

Paradise Helicopters provided the most reasonable rates and gave me and my buddies a truly memorable experience. We were fortunate enough to see the lava flowing in all of its glory.

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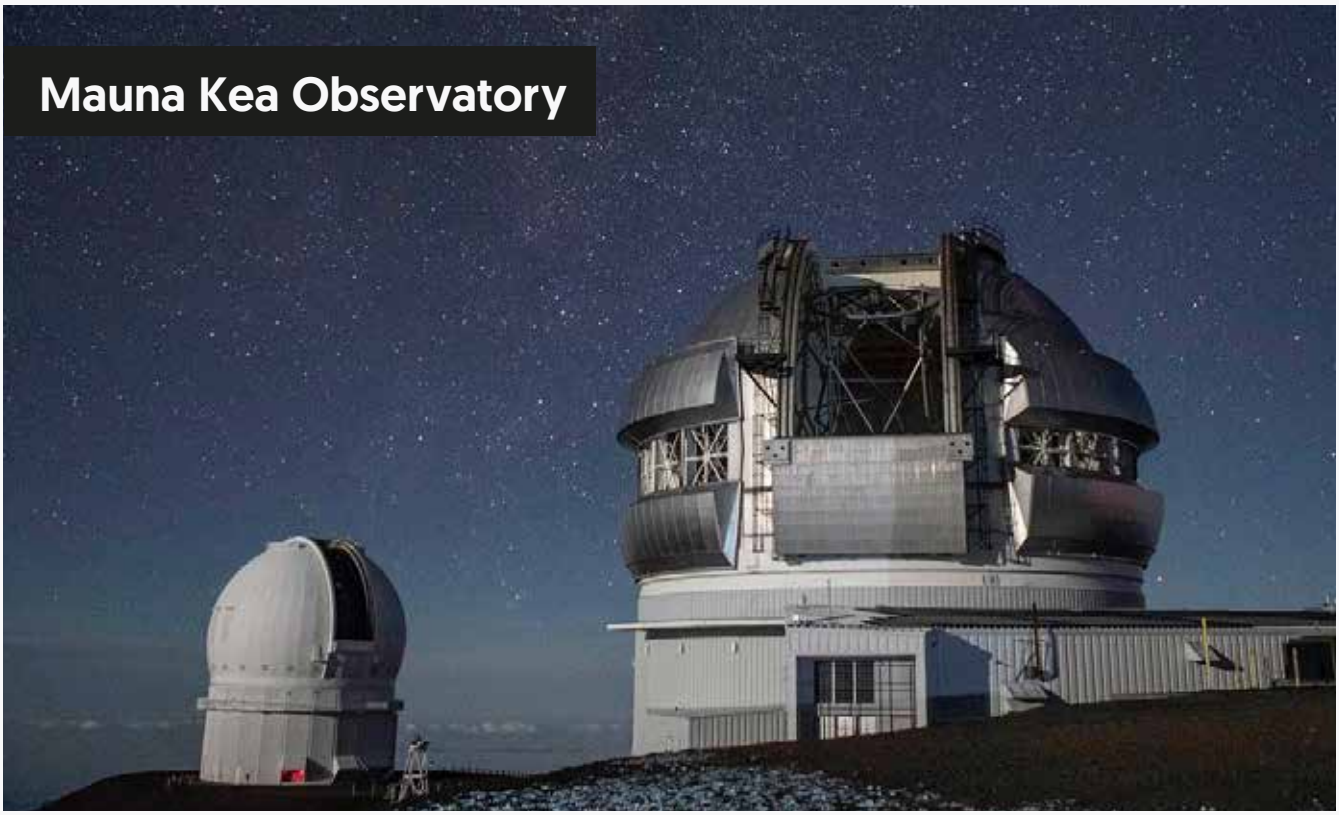

If you (like me) love photographing the sky, you're in luck in Hawaii. The Mauna Kea Observatory is one of the greatest places on earth to photograph the Milky Way!

It's perched atop Mauna Kea, which is the the largest mountain on earth from the seafloor to mountain top.

Tips for Photographing at Mauna Kea

- 1. Give yourself time to adjust to the high altitude. Mauna Kea juts out over 13000 feet above sea level. Because the observatory is situated so high in the sky it's important to properly acclimate yourself before making the trek to the top. A great way to do this is to spend about an hour at the visitor center (situated at 9000 feet) to adjust your body to the elevation.

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- The road is rough. A 4 wheel drive vehicle is necessary when traversing the steep and jagged road to the top. This is non-negotiable!
- The weather can be challenging. Muddy and icy conditions are possible throughout the year so make sure you check the weather before making your trip. Fortunately the Park service does a great job of restricting road access to the top when the weather creates havoc.
- Be respectful. Once you get to the top, make sure you restrict cell phone usage. Phones and the use of electronics interfere with the observatories.

Getting to the Good Stuff

Preparation is key if you want to maximize your photography time and subject matter in Hawaii. I planned out my trip meticulously which allowed me to capture a number of perspectives.

Be sure to consider what you'd like to photograph in Hawaii, then do some research to make sure that you can make the most of your time.

For instance, I love shooting Milky Way time lapses, so I spent my time acclimating at the visitor center productively, learning when to set up a time-lapse of the landscape as the moon was setting, which yielded awesome results.

Once the time lapse was set up and running, a friend and I decided to make the most of our journey to the summit in a rented 4-wheel drive. The road up was pretty terrifying, with cliff edges featuring heart dropping edges. If you decide to adventure...be careful!

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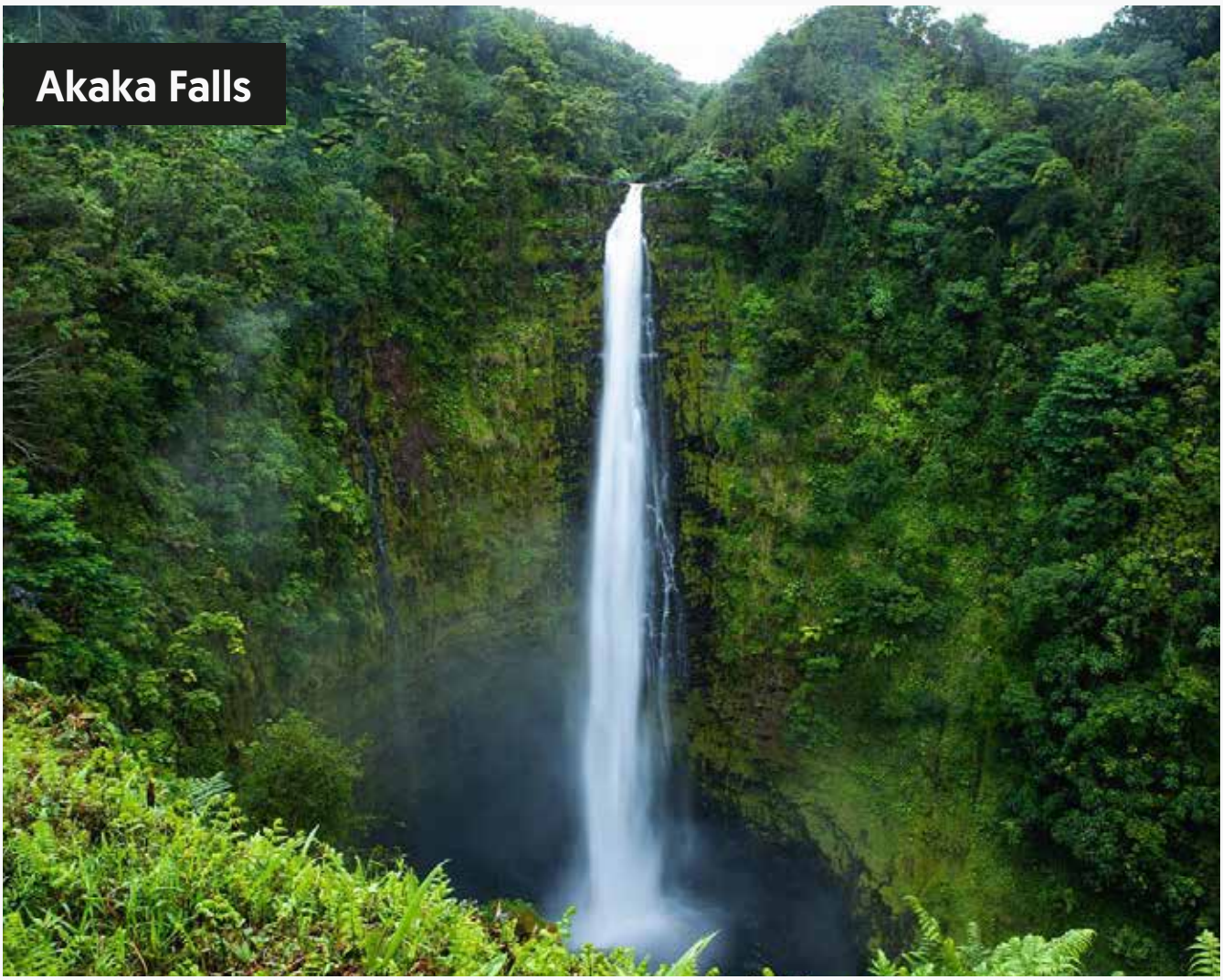
At the top of Mauna Kea, the view was absolutely spectacular. We parked our car by my favorite telescope: The Gemini Telescope. I'd seen it countless times on documentaries and on TV but I must admit nothing gives it justice aside from seeing it up close. It's a powerful sight to behold under the darkest skies!



The song may say "don't go chasing waterfalls"...but that's exactly what I wanted to do in Hawaii.

I'll admit Akaka Falls is a giant tourist trap--but that doesn't mean it's not worthwhile. It's easy to get there: just Google the location and you'll find a giant parking lot and half mile trail to the Falls.

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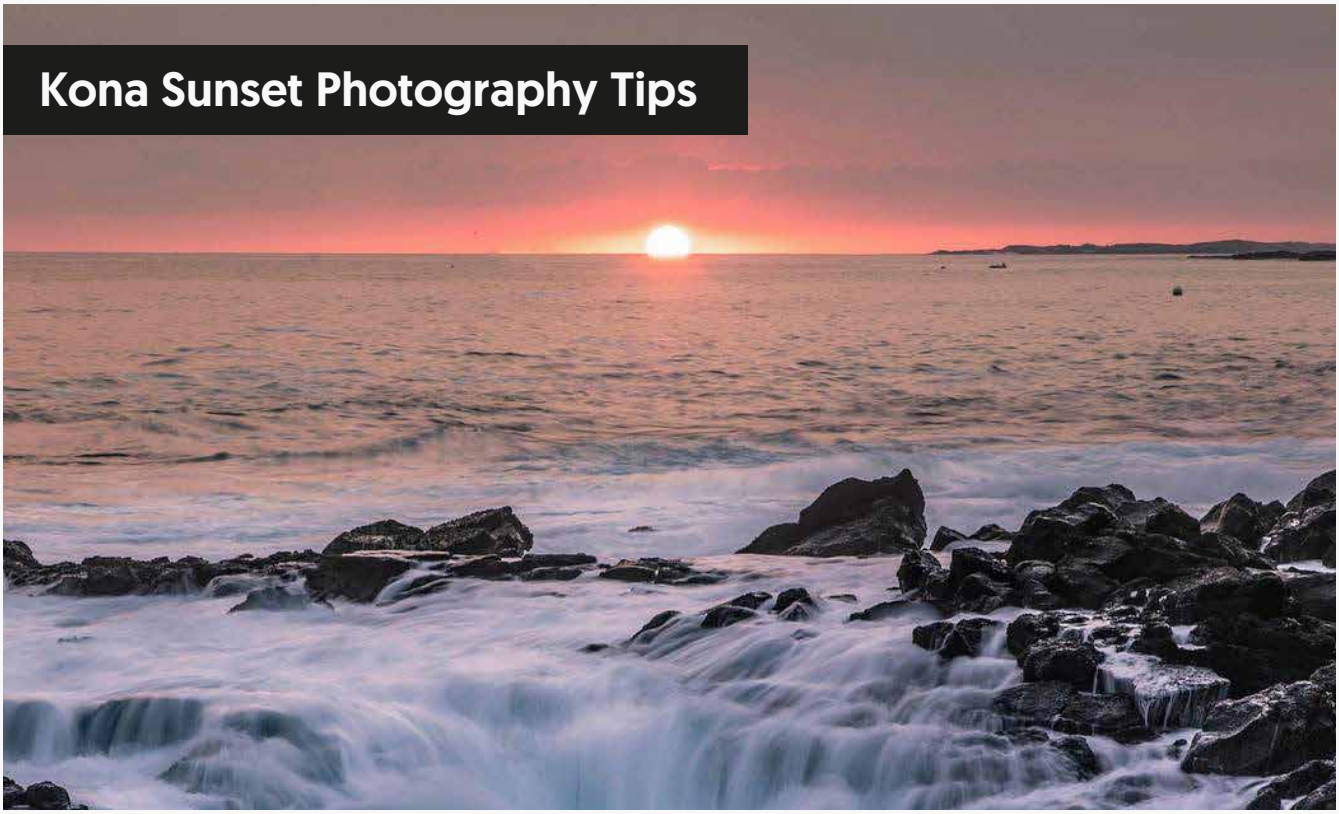
Tips for Photographing Akaka Falls

- Get there early. If you go at peak time you may find it extremely hard to set up a long exposure composition that suits you.
- Bring an umbrella. There's always a chance of rain at one of the wettest places on earth. The region gets over 200 inches of rain a year
- Set up your tripod tall and high before getting on the trail. The tight squeeze makes it hard to really spread your legs — tripod legs that is!
- Keep your gear dry! Bring a waterproof backpack for your camera gear — you may regret it if you don't.



You can't write a Big Island Photography Guide without at least mentioning the amazing sunset photography on the island's western coast.

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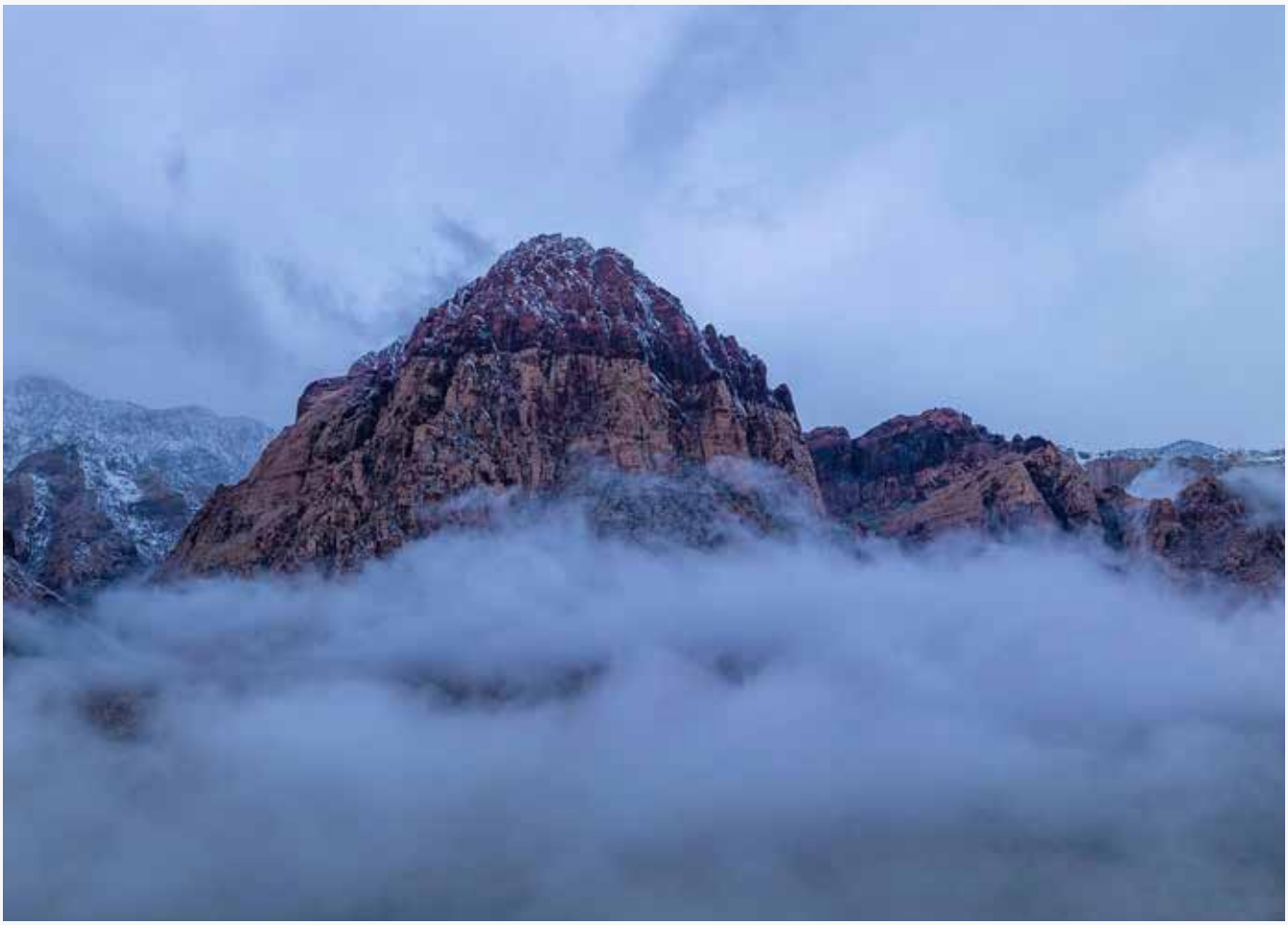
Kona is much drier and warmer than its neighboring cities to the East, which is probably why the sunsets are much more visible and epic.

Honestly, find a perch on any beach and you'll find the perfect sunset composition. If you find some volcanic rocks or black sandy beaches with jutting rock formations you're sure to find amazing sunset compositions.

When capturing a Hawaiian sunset, you may find it to be effective to underexpose your shot to get more detail in the sun and bring out the colors of the foreground in post production.

Fog Photography



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Fog has a translucent, ethereal quality that can make for truly magical photographic images. However, attempting to capture fog in photographic form can be just as fleeting as the quality of this natural element.

While fog and its buddies mist and haze are notoriously difficult to photograph, they're not impossible to capture. It's all about understanding how to prepare properly.

Understanding Fog

Before you can really understand the basics of fog photography, it is important to get a better idea of where and when fog commonly appears and how it can affect your photos.

Fog typically forms in the mid to late evening and normally lasts until the next morning. While foggy conditions can develop anywhere, it's a far more common phenomenon near the surface of water.

Fog develops because there is moisture in the air. With this in mind, you need to be aware of condensation, and of droplets condensing on the surface of your lens or inside your camera.

If you are planning on shooting in the fog, you need to be sure you are taking care of your equipment while you do it. You can bring a lens cloth and sealed camera bags with you, but the best thing you can do is to pay attention to how much moisture is really ending up on your equipment.

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How Fog Can Set the Scene

When photographing fog, you need to let go of the idea that your scene is going to be clear and defined. Most scenery is going to be void of color saturation and contrast, which is particularly important to remember if you are shooting a familiar setting in foggy conditions.

That is to say: fog is a type of natural soft box. It reduces contrast, provides a much dimmer lighting and typically requires longer exposure times. It also makes the air more reflective to light—which can sometimes confuse your camera's light meter and cause it to think it needs to decrease exposure (it does not).

With this in mind, it is important to remember that much like shooting in snowy conditions, you will need to plan on some exposure compensation when shooting in fog.

Another thing to remember about fog is that it's not predictable. It's not going to move just how you want, so you need to work with it rather than trying to get it to work with you! Here are some additional tips for photographing in foggy conditions:

How to Work With Lighting in the Fog

It's hard to navigate lighting with fog. Since there is so much moisture in the air when it is foggy out and so many water droplets around, light will scatter and reflect far more than it normally would.

Ultimately, this is can soften the light, but it also means that light streaks are going to be visible as well if you have a concentrated light source (such as the sun or an artificial light).

This isn't such a bad thing, as light streaks can create beautiful effects. The key to making the rays stand out (or disappear entirely) is to plan out your vantage point.

While every situation will be a little different with fog, a good rule of thumb is that light rays are going to be more visible if you are located close to where you can see the light source directly. This is also known as the "off-angle" perspective.

Lighting will always provide challenges when shooting any subject in the fog, but if you are able to emphasize the light sources you have and take advantage of the unique way that fog manipulates light, you can end up with some truly outstanding photos.

Tips on Emphasizing Depth in the Fog

Another challenge with shooting in the fog is capturing depth in photos. Fog impacts the contrast, so in a photo where you have a lot of layers of depth, it can mess with your composition.

Once again, this will always be a challenge in the fog. However, here's a great tip: make sure that you have at least one focal point close to the camera. This can be a person, a bush or part of the scenery. It can help create a more pronounced sense of depth.

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Having a strong foreground element can really emphasize the depth of the fog. Having something close to the camera ensures that at least a portion of your image can be in real color and in high-contrast. This will also emphasize the moodiness of the fog in the background and make sure that the depth perception of your photo isn't completely off. This is a simple way to bring some interest to your photo while still highlighting the beauty of the fog.

How to Captures Silhouettes in the Fog

A great fog photography technique is to capture a shape or silhouette amidst the fog. This can bring a very beautiful, but very eerie tone to any photograph, regardless of the subject.

This is a great approach to take when you don't have anything close up in the foreground to shoot and when the fog is particularly thick or washing out all normal lighting in your scene.

The key to this type of capture? It's all about the exposure. You need to set your exposure based on the fog, not the subject, and this will cause the subject, such as an animal or a person, to appear like a dark silhouette.

Another way you can use exposure to create this look is to dial in a negative exposure compensation. This will ensure that the subject of your photos don't turn out too bright and instead look like a nice, dark shape amidst the fog.

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It's All About Timing When Photographing in the Fog

Timing is everything with fog photography. Timing directly impacts how the light appears in your photo. Depending on the type of fog you are dealing with, light can move in different clumps and thicknesses throughout the scene.

Fog is always moving and changing so you need to be ready to move and change with it. This includes considering the texture of the fog as you shoot (yes, fog has texture).

Take the time to watch and wait for the most interesting fog distribution. Chances are you will only have to wait a few minutes, since fog is constantly moving and changing.

Be prepared! And when the fog attains that perfect texture you have been waiting for, make sure that you use a short exposure time. Using too long of an exposure time can actually smooth out the look of the fog, and blend away that beautiful texture that you waited for.

For optimal texture-capturing with fog, your shutter speed should generally be one second or less. However, if the fog is making like molasses and moving slowly, you can use a slightly longer shutter speed.

Experiment and try it out! Fog and mist can be extremely unpredictable, and that makes them difficult subjects in photography. However, if you're able to be patient and go through the trial and error, you can end up with some seriously moody, mysterious, and beautiful photos

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Side bar: 7 Useful Winter Photography Tips

While plenty of us (myself included) are not fans of cold weather, there's no denying that the winter has a stark beauty that shows up wonderfully in photographic form. The low winter light, eye-catching contrast, and snowy conditions can make for compelling photography.

However, the same conditions that make winter beautiful can also prove challenging for shooting. The low winter light and early sunsets can prove challenging logistically, and shooting snow and ice can be challenging due to the many reflections that can throw off the balance of your shot.
It's important to have a base of knowledge for key tips in winter shooting. Keep these winter tips in mind so that you can capture the pristine beauty of this cold time of year.

1. Account for the chill. If you are shooting winter scenery, then chances are you are shooting in below freezing weather. Make sure that you wear warm clothes and bring heat packs and quality gloves that you can shoot in, many photographers prefer fingerless gloves, so that their fingertips are still able to manipulate the camera but don't feel like they're going to freeze right off.

You will also want to make sure you invest in a good camera bag and one that is not only insulated, but waterproof as well. Cold weather usually means snow—and you don't want snowfall or wet sleet damaging your camera equipment.

You should also make sure that you bring spare batteries—and that you put them somewhere that they can stay warm. Batteries will lose their power faster in

extreme cold weather, so you want to make sure that you have spare batteries with you just in case.

Another tip to consider is to bring a sturdy tripod. Even if you weren't originally planning on shooting with a tripod, it can be your best friend in cold weather. If you are shaking from the cold trying to get a steady shot, a tripod can help ensure you get a crystal-clear image. Just make sure the tripod is durable enough to be set up in the snow.

2. Get in focus. One of the first things photographers will likely notice when they start shooting in the snow is that focusing tends to be an issue. When you have low-contrast situations such as snowy, foggy days or extreme overcast it can be difficult to focus. This is also true when you are shooting while snow is falling.

Chances are, when you try to use autofocus in these conditions, your lens is going to start fluttering in an attempt to focus. This isn't your camera malfunctioning, it just means that your camera doesn't have anything to lock focus on.

The key is to switch off of autofocus to manual focus. Then, hold the shutter button down halfway until you focus. When you do, your viewfinder will likely light up letting you know you are ready to shoot.

Manual focus does take some trial and error—so make sure that you have some patience when you are attempting to shoot with manual focus in the snow. However, with a little patience, you can get the crystal-clear image in the snow that you are looking for.

Section 2 - Landscapes and Nature

3. Remember, Snow Can Trick Your Meter. Perhaps the biggest challenge that comes with shooting winter landscapes is that all of the snow on the ground tends to mess with your meter. Finding the right exposure when there is snow everywhere can be really difficult.

As most photographers know, camera meters are calibrated to base exposure on neutral gray, which can dominate your camera's meter exposure readings. This is why, many times, pictures taken in snow end up underexposed and snow looks dull-grey instead of bright white.

You will need to play with your exposure, but a good rule of thumb is to add positive compensation or overexposure. Most snow-covered scenes will turn out better if you overexpose by +1 stop. This is especially true if you are shooting on an overcast day (which many times in the winter, you are).

If you are trying to capture a bright, sunny snow scene, you may want to overexpose by two stops. You should never really need to overexpose by more than this, otherwise your images will look blown out and you will start to lose the detail of your shot. Depending on your camera, you may need to tweak your metering a bit, but this is a great place to get started.

4. Be smart with your filters. Filters are a great tool for any photographer, no matter where they are shooting. When it comes to shooting in the winter, the polarizer is your best friend.

This is great because the polarizer is a great filter for a number of different situations, so you likely already have it—and if you don't, you can absolutely use it again. However, be careful to not over-polarize.

Section 2 - Landscapes and Nature

Other filter options include graduated neutral-density filters which can help create a variation between the foreground and the background in snowy situations. Warming filters such as 81C, can neutralize the snow's blue cast that can happen on sunny days in the snow.

Don't be afraid to play around with different filters to create unique effects with your photos. Snow is such a stark backdrop, that sometimes different filters can have a fun effect on the final product.

5. Keep a good color balance. This should not be a big surprise, but finding the correct balance when shooting in snow can be very difficult. After all, most of what you are shooting is going to be bright white in color.

In most situations, snowy scenes will read more blue on the color spectrum. You can adjust your white balance, to get everything right in your camera before shooting. You can also use the "flash" setting. This will make up for the blue tone you tend to get when shooting a snow-filled image and can bring some warmth to the scene.

Make sure you don't go too far, if you try to get rid of all of the blue, then your snow scene can end up having a yellow cast to it—which can make your photo look dull, dingy or dirty. A slight blue cast is ideal, as it creates a warm, yet balanced image.

6. Find the right shutter speed. Winter weather shoots aren't just about taking pictures of clean, crisp snow on a still sunny day. Many times, winter weather means winter storms. This is why it is so important to choose the right shutter speed.

Section 2 - Landscapes and Nature

Fast shutter speeds will stop any movement, which as wind and snow movement, but if you use a slow shutter speed—it can create a blurred motion. Sometimes, you might want to have the blurred motion in the snow to show how quickly it's coming down, or you may want to capture something in the snow and depict every individual snowflake as it falls.

If you are planning on shooting wildlife in the snow, such as some deer, you will likely want to use a fast shutter speed. If you are shooting a landscape while there is rapid snow falling down, a slow shutter speed can have a neat effect.

This is why it is so important to pay attention to your shutter speed, and keep in mind what you want your end result to look like.

7. Take care with your lens. Winter weather can take a beating on your precious lenses. Make sure that you keep a lens cap on at all times when your camera is not in use—particularly if you are shooting while it is snowing. If snowflakes land and melt on the front of your lens, it can cause serious damage and it can also smudge or fog the lens.

If this does happen, do not blow warm air on the lens, otherwise it will put a thin layer of ice coating on the lens. You should always treat your camera in the snow as you would in the rain—and consider getting rain covers before you head out in the snow. Doing this will save your camera and save you a lot of turmoil in the end.

Keep these tips in mind when you are planning on shooting in winter weather conditions. They can go a long way in making sure that you not only keep yourself and your camera protected, but that you are able to deliver the highest-quality images possible when you are done.

Section 3

The Sky

Section 3 - The Sky

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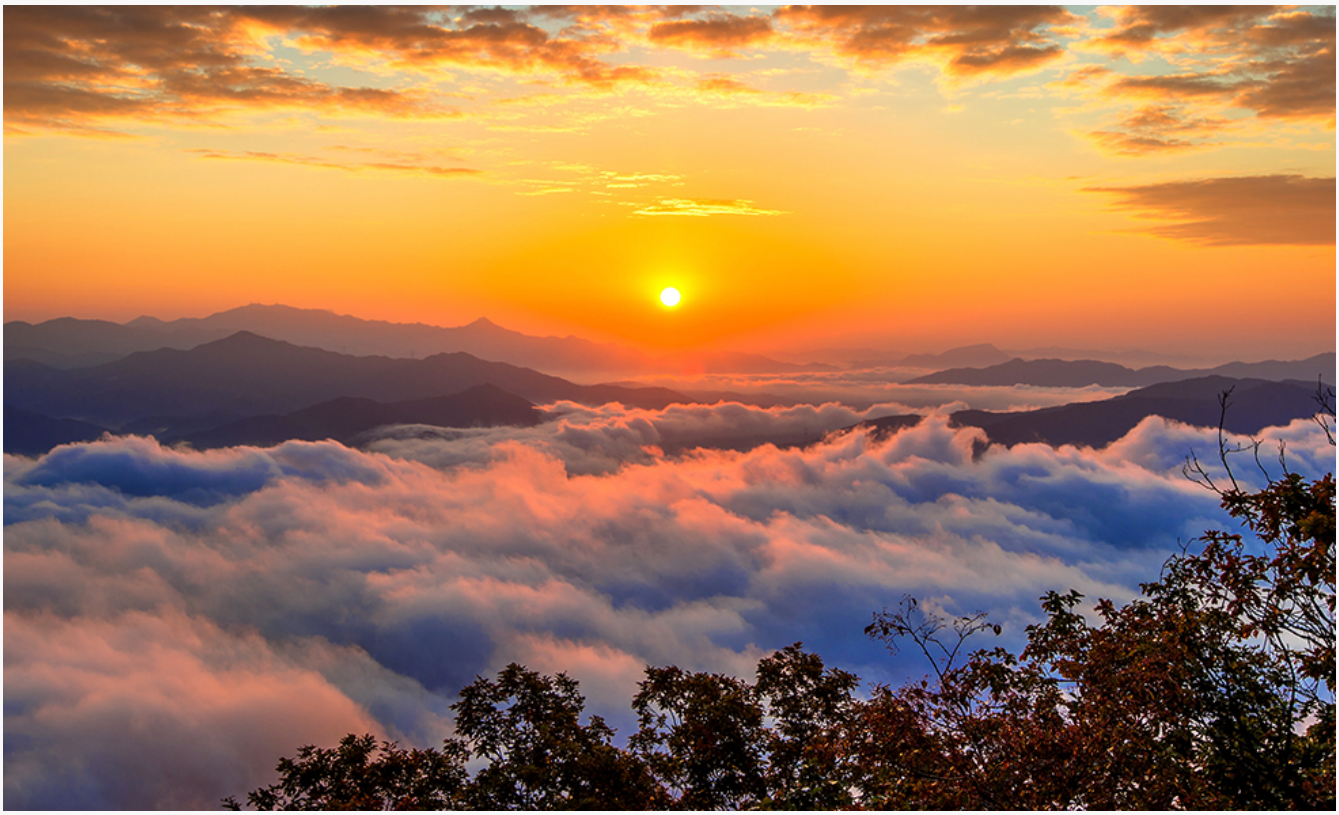
"Shoot for the moon. Even if you miss, you'll land among the stars."

Norman Vincent Peale

Sunset Photography



Nothing can match the beauty of a golden sunset as the day comes to a close. While wonders like this can they can only truly be enjoyed to their fullest in person, a well-composed photograph has the potential to come in a close second place.

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Bringing to life the colors, feeling and beauty of a sunset can be tough in photographic form, but it isn't impossible. With the right setting, exposure and technique, you can capture sunsets so clearly, it helps the viewer experience it as if they were almost there.

Ready to banish underwhelming sunset photos? Pay close attention to these tips--they may just make all the difference!

Plan Ahead

Wouldn't it be great if you spontaneously stumbled upon the world's most beautiful sunset and instantly captured it in all its glory?

Sure. But spontaneous sunset photos rarely turn out in the way that people want them to. If you want a truly stunning sunset (or sunrise) photo, scope out your location first and make sure you are clear on the timing. Typically, you only have less than 30 minutes to capture the sun, so you need to be there at the right moment. Make sure to arrive with plenty of time to set up!

As you look for a location, keep in mind, it isn't just the sun you want to capture, it is the shadows and dimension that this sun creates. Look for a location that highlights the beauty of nature and that will be enhanced by the sunset and that will create more visual interest in your shot. The sun alone typically isn't enough; it needs context.

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Plan on Taking Different Shots

Sunsets are like snowflakes: no two are exactly alike. This means that there's no set position from which a sunset is always stunning. It depends on the location, and the sunset.

Plan on taking your shot from a variety of focal lengths. In some settings a wide angle lens that captures the landscape of the area can be the perfect way to depict the beauty of the scenery around you.

With other sunsets, you may want to hone in on the sun itself, and zoom into the star of the show.

Either way, you need to be prepared and to make sure that you have a tripod to help you out. Whether you go wide angle or zoom in, don't forget the old adage of the rule of thirds. In some situations you may want to break the rule, but in general, keep it in mind when looking at your horizon, sun and silhouettes so you can keep the big picture in mind, instead of just the sun.

Don't Ignore the Clouds

There are so many photographers that place so much emphasis on the sun in their sunset photos that they completely forget about the next-biggest element in the shot—the clouds. The clouds in your photo can make or break your shot, so pay close attention to the cloud situation before you take your photo.

Typically, the more clouds you have in a sunset photo, the better as they can help reflect the beautiful hues in the sky as the sun goes down. Of course, there are

situations where too many clouds can overwhelm your shot, you want that perfect balance of clouds and blue sky before the sun sets in order to get the full range of colors in your final product.

Start With the Settings

One of the most difficult parts of capturing sunset photography comes in actually capturing the sun itself. When the sun appears in your photo, it can be extremely bright and it can throw off the onboard light meter in your camera.

Any easy fix for this? Use your manual settings. Don't be scared: just give it a try. This will prevent you from getting a photo that is too bright, or too dark and will help you get that deep, glowing orange that captures the setting sun's fiery vibrancy.

Choosing Your Aperture

For many photographers, choosing the right aperture with something like a sunset photo can be very challenging. Typically, when shooting a sunset on manual, somewhere between a F8 and a F10 is a great place to start, with F8 for shots where there isn't a lot of light left and F10 when it starts to get darker.

Getting the Right Exposure

A big key to sunset photography success is finding the right subject, setting the scene and creating something beautiful and memorable. That being said, there are some technical aspects to keep in mind as well, especially when it comes to exposure.

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The first thing to remember is there is no “right” exposure for a sunset photo. For some photographers, using an auto exposure lock on their camera is a great place to start, especially if you aren’t a fan of only shooting in manual. You focus on a dark portion of your shot, such as a tree or the ground, then reframe the photo so you focus on the sunset, this results in a more overexposed shot.

There is also bracketing a technique where you use the camera’s suggested exposure then take a few shots both under and over the suggested mark. This will give you a series of images at different exposures with slightly different colors and results so you can choose the one that works for you.

Getting Your Perfect Shot

So...you’ve tried manual settings, messed with the exposure, and set the scene. Don’t just click a few shots and call it good. Sunsets are chameleons, and they can change a lot in a matter of minutes. So keep shooting, and be patient.

Your shot may look completely different from one minute to the next, so imagine the different options you can get if you wait it out for all 30 minutes of the sunset. The key to the perfect sunset shot all lies in patience and in testing out different options with your camera and your scenery. There is no one recipe for how to do it.

Keep playing around and if you give your shot the time it deserves you may just end up with an image that truly captures the sunset.

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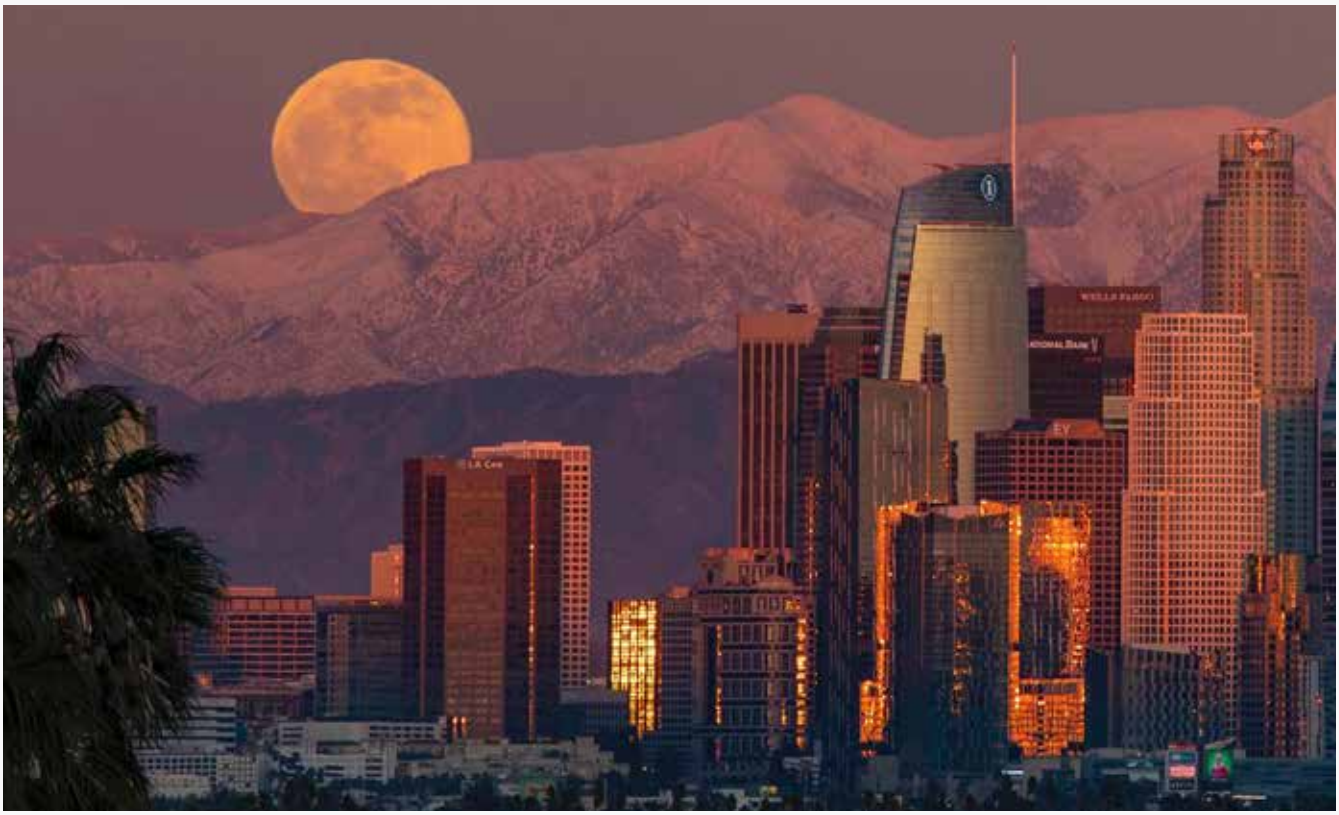
How to Photograph a Lunar Eclipse



A lunar eclipse is truly a singular experience--it's the type of thing that can make you feel humbled and awed all at once. That's to say: if you've never photographed a lunar eclipse before, it's an experience you do not want to miss.

Photographing a lunar eclipse isn't always easy, but if you take the time to learn the ropes, you can really have some outstanding results. It's also one of the few subject matter that can actually look even more outstanding in photographic form than in person, if you capture it correctly.

Want to capture a lunar eclipse in stunning photographic form? Follow these tips!

SIDE BAR: What is a Lunar Eclipse, Anyway?

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Lunar eclipses occur when the shadow of the Earth blocks the light of the sun (which normally reflects off the moon).

There are actually three different types of lunar eclipses; total, partial and penumbral. While all three are really special to see in person, the total lunar eclipse is by far the most dramatic of all these events.

For centuries, lunar eclipses have attracted a great deal of attention, especially when the total lunar eclipse turns the moon red—also known as the Blood Moon. While these lunar eclipses have sparked numerous tall-tales and horror stories, this remains certain: it's a great photographic subject.

Lunar eclipses occur annually, typically in July and January. Where you are located in the world depends on whether or not you can see it. This phenomenon doesn't happen often, but when it does it creates a wonderfully spooky effect on the sky and on everything around it, and it makes for some really cool photos.

Preparing For Your Lunar Eclipse Photo

The first step in photographing the lunar eclipse? Knowing when it's going to happen. Since it occurs infrequently, you'll need to plan ahead.

The lunar eclipse is a one-night affair, and only lasts for a few hours. If it's a full eclipse, the peak time for photos will only be about one hour.

Like with many outdoor natural phenomena, there are factors that can make your shot unpredictable. While you can never anticipate everything that will occur,

it is possible to do what you can to make sure that you're prepared for as many scenarios as possible by bringing the right gear.

Preparing For Your Lunar Eclipse Photograph

Set yourself up for success! The right gear can make a big difference in your finished shots and overall comfort while shooting a lunar eclipse. Here's what I suggest you pack in your bag:

- **DSLR camera (or mirrorless) with full manual exposure control capabilities.**
- **Sturdy tripod**
- **Remote or electronic release**
- **Timer**
- **Headlamp or flashlight**
- **At least two fully charged camera batteries***

* This is particularly important if you are planning on shooting in January and the temperature is low. You need to account for the fact that batteries don't last as long in cold weather.

In addition to having the right gear, you also need to be in an optimal location and at the right time. Make sure that you are away from city lights and to know the timing of the lunar eclipse. You should be able to easily find this information online. Be sure to familiarize yourself with the following information:

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- **When the partial eclipse begins**
- **When the total eclipse begins**
- **The time of the maximum eclipse**
- **When the total eclipse ends**
- **When the partial eclipse ends**

Keep this in mind, too: if you want a subject in your photograph, such as a certain building, you want to have a more accurate time scale of the eclipse to make sure it lines up perfectly.

Fortunately, there are a number of different apps that can help you do this such as PhotoPills or The Photographer's Ephemeris. These will help make a plan so you know just where to stand at the time when the eclipse will be working in favor of your desired shot.

How to Shoot the Lunar Eclipse

You've done your due diligence, you've packed your bags, and you're in the right spot. Now, it's go time! Here are some tips for shooting the lunar eclipse when you only have a few minutes with each position with the moon.

Know Where to Focus

Focusing can be a real problem with lunar photography. Happily, the rule of thumb is simple to remember: focus on the moon

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The most accurate way to get a sharp photo during the lunar eclipse is to use live view and magnify the image to zoom in on the moon. You will need to focus manually, but it will be worth it.

If the moon is bright enough, you can use the autofocus. Before the eclipse begins either manually or autofocus on the moon, but then turn the autofocus off so your camera doesn't focus on something else.

You can also consider using a long lens to zoom in on the moon. Don't try to include too many foreground images.

Use the Manual Exposure Mode

Make sure that you use manual-exposure mode and check the camera's highlight alert. This will help you make sure that you aren't over-exposing the moon, which can take away from your finished shot.

You should always stick with an aperture of f/11. If you are dealing with a full moon, you want to start at 1/60 second and 200 ISO.

If you have a half or quarter moon, then you should speed it up to 1/30 second 200 ISO. With less than a quarter moon, you should go to 1/15 second and 200 ISO.

When the moon is fully eclipsed, that's when you really want to start making some changes. At the beginning and end of totality your exposure should be 8 seconds at f/11, 800 ISO. If the moon is fully eclipsed at its deepest totality, it should be at 8 seconds f/11, 1600 ISO.

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Of course, these are just suggestions as every camera and every photographer is different. But these are good starting points and you can tweak it from there.

Once your settings are in place, it is time to shoot away. Remember: keep it simple, especially your first time.

Other Tips for Shooting the Lunar Eclipse

While to a certain degree effectively shooting the lunar eclipse will require trial and error, here are some tips that can help reduce your learning curve:

- Use a tripod. At night, longer exposures require the steadiness that only a tripod can bring. Make sure it is a locked tight!
- Give it some flash. Use an electronic flash or a flashlight to light-paint the foreground for a unique effect.
- Capture a progression. To really see the dramatic changes made with the lunar eclipse, do a series of photos to see its progression.
- Use a timer and a trip shutter. This can help you capture the eclipse at different times during the progression. Just be sure that you adjust the exposure times.
- Don't put too much in the foreground. A simple tree is enough to cast off of, without making the photo seem too busy, you want the lunar eclipse to be the main focal point.
- Keep it simple. Making it too complicated likely won't pay off. Lunar eclipses don't happen every day, so if you spend too much time trying to capture creative foreground shots or artistic angles, you may end up missing it all together.

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Photographing The Northern Lights

The Northern Lights are one of the most famous natural wonders in the world. Viewable only in the winter in the Northern Hemisphere, there are many people who travel from all over the world in order to see the Northern Lights in person. To capture them in photographic form is an inimitable experience...but it's not without its own unique set of challenges.

If you look around the internet at northern lights shots, you'll quickly see that the results have the potential to be...well, out of this world. Let that be your motivation to go through the efforts you need to for photographing the northern lights...the results can truly be worth it!

Ready to take on this endeavor? You just have to know how it is done, and know a little background about the Northern Lights and how to photograph them.

Section 3 - The Sky

Side Bar: All About the Northern Lights

So, what exactly are the Northern Lights? They are a series of discharged particles that come from the sun and penetrate the Earth's magnetic shield. This creates a "shield of light" when it enters our atmosphere. This is why the lights are so uniquely colored and while they seem to go on forever. This is also why they are difficult to photograph.

The key thing to remember about the Northern Lights is that they are always changing. Sometimes the light is different colors, sometimes the light is really bright, other times it is soft and subtle. So, while there are tips and tricks to help you capture the Northern Lights, setting a definitive guide on shooting the Northern Lights is difficult, because you never know what you are going to get when you try to shoot them.

While many people spend time preparing to see the Northern Lights in person, very few people actually know how to photograph the Northern Lights once they get there. But if you're a photographer, you'll definitely want beautiful photographic proof of your adventure!

When and Where to Photograph the Northern Lights

Since the average person doesn't live in the Arctic Circle, where Northern Lights viewing is optimal, most people have to plan a trip around seeing them in person.

The best time to travel and see the lights is in the autumn and winter months. This is when periods of high pressure are most common, meaning you'll get the most

reliable views. The winter is also a great time to shoot the lights because the atmosphere tends to be more clear, an there is lower light pollution—that is to say, your photos will have more clarity.

Avoid urban areas if possible when trying to shoot the Northern Lights, and do your best to coordinate your shots during new moon cycles. All of these things can help improve your chances of getting that perfect shot.

Setting the Scene for Shooting the Northern Lights

Be prepared! A little planning can go a long way when it comes to photographing a natural phenomenon like the Northern Lights.

Here's the best way to approach photographing this phenomenal sight.

- **1.** Make sure the sky is dark and clear. Try to get less than 30% cloud coverage. The great thing about photographing the Northern Lights is that you can do it under the moonlight—something that isn't possible when photographing the Milky Way.

- **2.** Check the Aurora Activity. This refers to the geomagnetic activity currently going on, and works on a scale from 0 through 9, with 0 being inactivity. 5 would be moderate activity or a minor storm, and 9 would be a major storm. You want some activity for the most dynamic shots.

- **3.** Make sure you have the right camera(s). A manual mode camera, where you can adjust the ISO, aperture and exposure time, is ideal. You will also want a full frame DSLR camera if possible.

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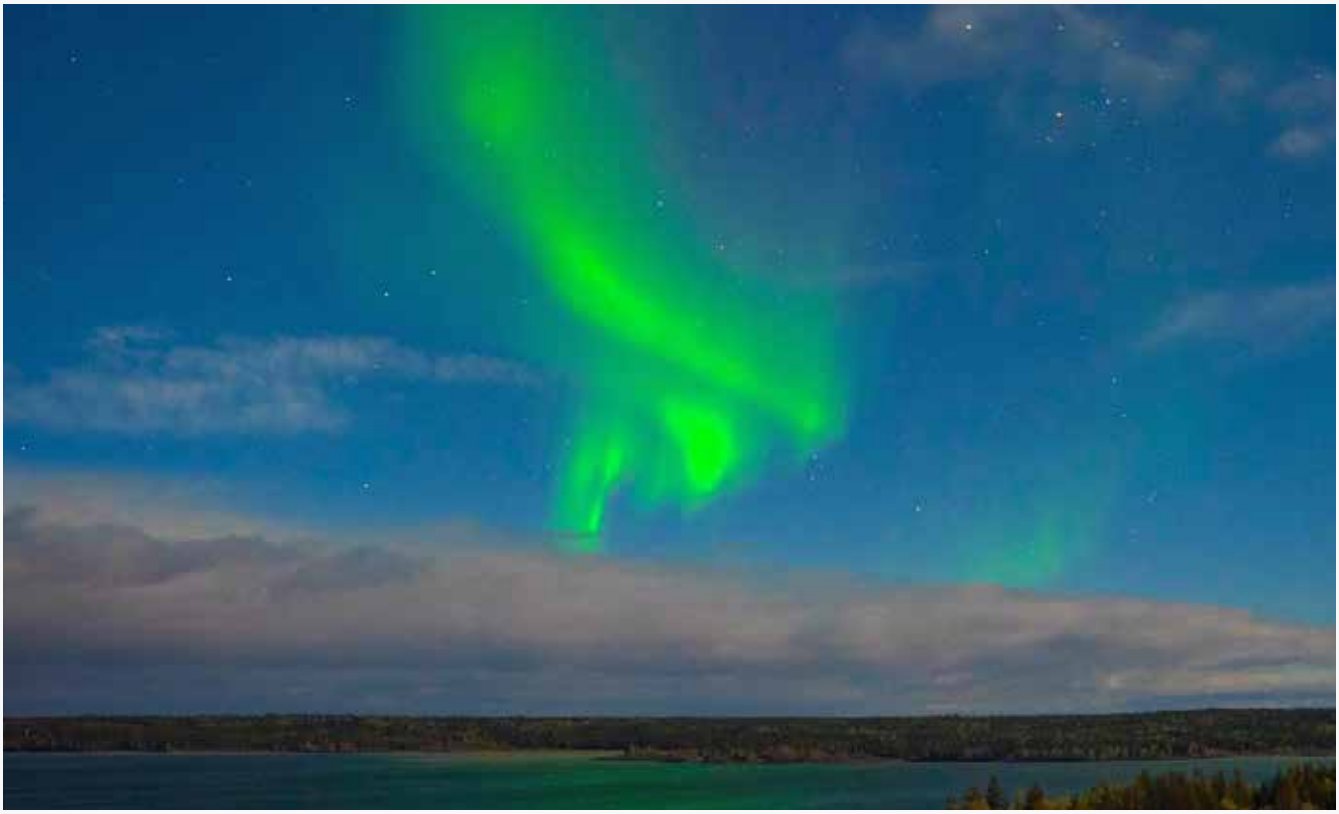
- **4.** Bring the right equipment. You need a tall and sturdy tripod. It is best to shoot on a tripod with a cable release. While it isn't required, a wide angle lens can help with the shot.

- **5.** Remove all of the lenses before shooting. This includes a UV filter. These filters can cause aberrations in your images.

- **6.** Bring extra batteries. Remember: batteries can drain faster in the cold, so bring extras.

- **7.** Prepare yourself. Layer up, because it's going to be cold! Make sure that you bundle up so that you're not miserable in the freezing temps.

How to Shoot the Northern Lights With the Right Camera Settings



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When shooting the Northern Lights, you'll want to set your camera to manual. You should also set your lens to manual as well.

You'll also want to turn off the flash and the image stabilization features as well. This is important because while automatic settings are great in the daylight, a camera can't see in the dark, so the automatic settings on your camera are not going to be able to measure its surroundings effectively.

Every camera is different, just like every photographer is different. So, you may want to tweak your camera settings based on your individual preferences. However, these are some recommended settings to help get you started:

- Use metric metering, aka evaluative metering when choosing your metering mode. This is recommended for shooting at night.
- Change your white balance to RAW for the best processing.
- Set your shutter speed to 20 seconds to start. If the lights are strong, you want a 1-6 second shutter speed. If there are soft lights, try a 15-30 second shutter speed.
- Start with an ISO of 400-800, and increase to 1200 if it isn't bright enough. If your image is too bright, lower your shutter speed or ISO. If your image is too dark, increase your shutter speed or ISO.
- Open your aperture as wide as it will go or to f/2.8. You want to allow as much light to get in as quickly as possible.

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Side Bar: Tips on Focusing

Focusing at night can always be tricky, and it can be even more difficult when shooting something like the Northern Lights. To get the full effect, you really want to make sure that you get a sharp focus.

Use the infinity symbol on your camera when setting your lens. You may need to tweak a bit from there, but it is a great place to start when attempting to focus at night.

You can also preset your focus during the day. Take some practice shots while focusing off in the horizon until the entire photo is in focus. Then mark the focus ring and the barrel of the lens so you can get the same focus later on.

A Final Note on How to Photograph the Northern Lights

When photographing the Northern Lights, make sure that you aren't increasing your ISO too much. It will impact your image quality. If you need to make adjustments tweak the aperture and exposure time.

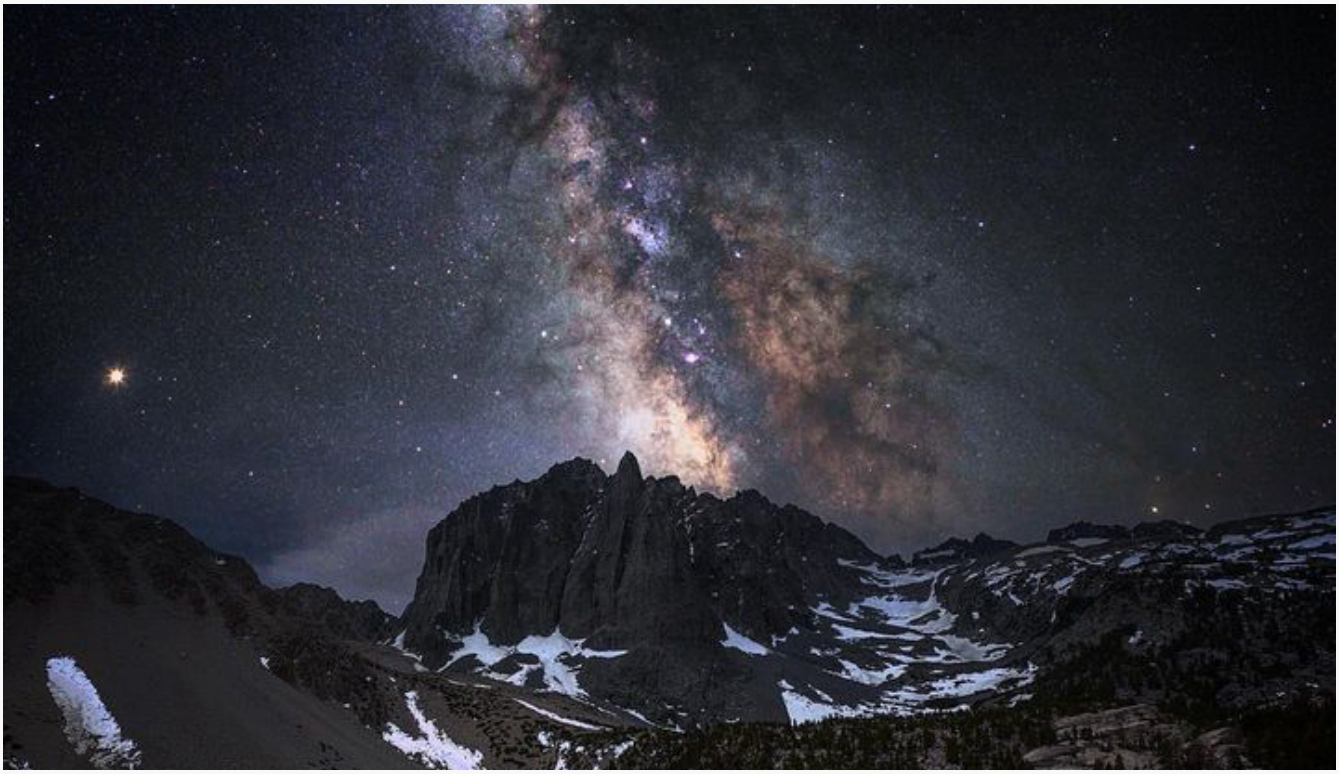
If you want to make sure you get a picture of yourself under the Northern Lights, all you need is a friend and either a manually operated camera flash or a camera. This is the one time when shooting the Northern Lights that you could consider using a flash.

Use your same settings when normally shooting the Northern Lights, just try to stay as still as possible when you are posing to get the best shot of you underneath the lights.

Section 3 - The Sky

Finally, don't get discouraged if you photo isn't perfect in the moment. You can do a lot with shots like this in post-processing!

How to Shoot the Milky Way



Very few things can compare to the unprecedented beauty of a sparkly night sky.

If you have ever seen the Milky Way in person on a clear night, then you know just how awesome (and I mean that in the literal sense) it truly is. As a photographer, you'll want your shots to look just as stunning!

Photographers of all types, from the novice cell phone photographer to the experienced professional, are drawn to the Milky Way like moths to a flame. However, the results are not always pretty. Capturing the beauty of this thick, glowing band across an evening sky is often more difficult than it seems, so it's important to do your research.

Section 3 - The Sky

Gathering Your Supplies

The right photograph always requires the right equipment, so before you go snapping away at the night sky, you need to gather the right supplies.

A Good ISO Camera

For great shots, you want a camera with good ISO capabilities since you will be shooting with hardly any available light. Typically, an ISO 3200 is a great place to start. A full-frame camera is preferable as well.

A Wide-Angle Lens

When it comes to choosing a lens for your Milky Way photo, a wide angle lens is always a good start. Since the night sky is so massive in scale, this is going to be the best way to capture the biggest portion possible of the Milky Way.

The specific size is up to you and is based on what you have and what you feel comfortable with, but in general I recommend something between 14-24 MM. The lower the aperture of the lens, the better as a faster lens will let you bring your light into your shot.

These are of course all recommendations, so if you only have the lens that came in your entry level DSLR kit, you can also make that work.

A Tripod

When shooting a picture of the Milky Way, a tripod is a necessity. You will want to take long exposures of at least 15 seconds, meaning your camera is going to need to be as sturdy as possible.

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A Remote Shutter

Lighting is one of the biggest obstacles when shooting the night sky. If you want to capture more light and create a brighter exposure, then you need to have a longer shutter speed. It can be helpful to use a remote to control the shutter on your camera.

Also, consider using the “bulb” mode on your camera, instead of one of your device’s programmed shutter speeds. This gives you more control over how long the shutter stays open and how much light you can bring into your shot

Setting the Scene

How do you manipulate the scene of something as big and as grand as the Milky Way to bend to your photographic will? THe short answer is that it’s pretty involved.

First, you need to get yourself in an optimum viewing place. If you really want to bring out the brilliance of the Milky Way you need to get out of the city and into as rural of an area as possible. The less human-made lighting around the better.

Time of year is also a consideration. Depending on where you live, different times of the year may be best for shooting the Milky Way. Yes, there is an app for that. Starry night apps for stargazers and photographers alike can help you find the best time to shoot and discover when the sky is going to be clearest. My favorite is called Sky View.

Section 3 - The Sky

Here's a little cheat sheet for planning the best times to shoot the Milky Way:

- Southern Hemisphere: February through October. Peak visibility in June and July.
- Northern Hemisphere: Late April to late July.

Pay close attention to the moon as well, as you will want no moon or very little moon showing. This is because, even though the moon can be pretty on its own, it can actually wash out some of the color and brilliance of the Milky Way.

Composing Your Shot

You've set the scene and found the right conditions for your Milky Way shot, and now it's time to actually take some photos.

You'll probably need to try a few different techniques until you get a final product you enjoy. The good news is, in general the Milky Way isn't going anywhere.

Need a starting point? Try focusing on a star instead of blindly setting your focus to infinity. This will help you get a clearer picture. Shooting on White Balance is also another way that many photographers get a clear shot and it also helps to create a more realistic and neutral temperature in your shot.

Processing

For many photographers, even experienced photographers, even a carefully timed and detailed shot can end up falling flat. The good news is that processing can help.

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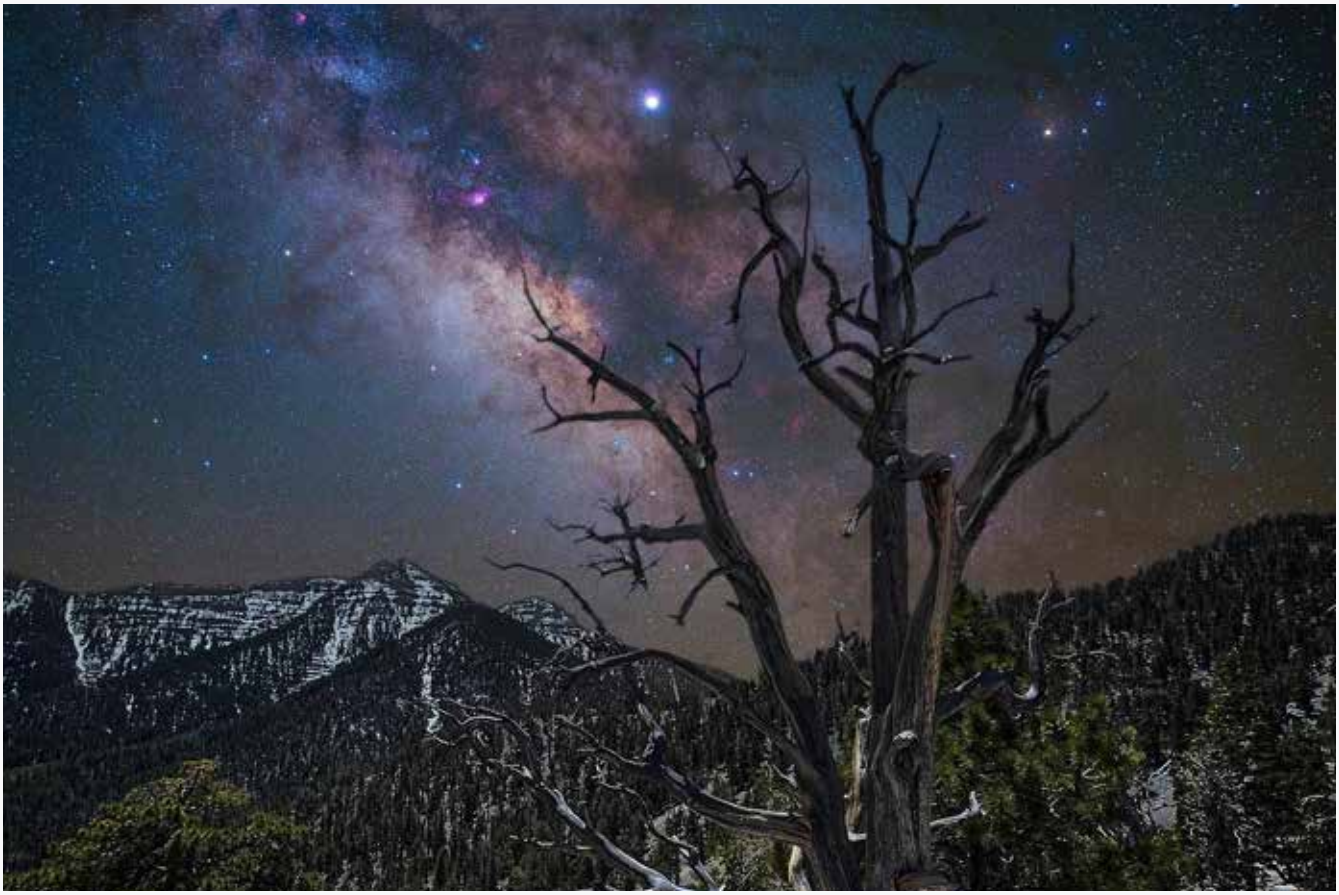
Obviously, the better your starting point is, the better your final product will be. As you start processing your photo at home, you can start correcting imperfections, bring out the details you want and hide the details you don't want until you get the final product your imagined.

You can fix lens distortions, color correct, change balance and perspective and while some people may see this as "cheating" the photography process, it is important to view it as enhancing the work that you've done. You don't want to over-do it and make your photo seem fake, or to change tones or colors that weren't there, you want to simply polish up your photo and help it look as close to what you saw in person as possible so that your final product looks incredible.

Shooting Deep Sky Photography



Section 3 - The Sky

Deep sky photography is all about capturing beautiful deep-sky objects in the night sky. Also known as astrophotography, this is a very unique type of photo-taking and is a term to simply describe using a DSLR camera and a telescope to capture up-close view of objects in space.

Not even looking through a telescope can compare to the images that deep sky photos can capture. This is because a camera can record even more light than we can comprehend with our eyes—which allows us to get the vibrant colors and contrasts that deep sky photos are known for.

This is a really fun type of photography and is also something that takes a slightly different approach than your standard point and shoot photos. It is also one of the most detailed and tricky types of photography, and it is known to test the patience of even the most skilled of photographers.

The best way to really master this type of photography is to start learning the basics and tweak this approach as you try to learn on-the-go.

Collecting the Right Deep Sky Photography Gear

Deep sky photography requires some pretty specific gear. Here's what you need:

Camera- Great news: even a beginner's camera will work for capturing deep sky objects. You just need a DSLR with a 30-second exposure option. Of course, the better the camera, the better off you will be.

Tripod- A tripod is vital for night photography. The sturdier the better, because you want your camera to stay put!

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Lens- A wide-angle camera lens is another necessity when shooting this type of photography. One of the most popular lenses out there right now for astrophotography is the Rokinon 14mm F/2.8. This is a great lens even for beginners because it has a faster aperture and comes at a budget-friendly price tag.

Telescope- If you are less interested in wide-angled shots that capture everything in the sky and more interested in capturing far away images close up, you'll need a telescope lens for your camera. There are specialty astrophotography telescopes available—just made sure that you have a t-ring adapter to connect the DSLR body of your camera to this telescope.

Tracking Mount- This is an often-overlooked accessory, but a highly important one. A high-quality mount that is polar-aligned can handle your telescope, camera and accessories. If you want longer exposures (and you should with this type of photography) choose one with autoguiding that allows you to take exposures of 10 minutes or more.

How to Take Deep Sky Images With a DSLR and Telescope

For most beginners the most difficult part of shooting is implementing the telescope into your photographs.

When taking deep sky photography, you will need to take several long exposures. This will help you capture enough light from a dim object out in space to still show color and details. Here are some other things you will need to do when shooting these types of photos:

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The Polar Alignment

For the best images, make sure the telescope mount is polar-aligned, or that it is able to turn at the same angle as the rotation of the earth.

Tip: If you are in the Northern hemisphere, you can use the North Star to align your mount.

Tracking

One of the most rewarding things about deep sky photography is that objects tend to show up brighter and more colorful than they would be if you were looking at the image through a telescope.

This is because a camera sensor can record more detail and light than our own eyes. This is why tacking is so important as it helps to make sure that the camera and the telescope lock on to the subject, so you can record this light and detail.

The best way to “track” or auto guide is to use a software program called PHD Guiding 2. This program will communicate with the telescope mount and make adjustments to the tracking as needed.

Exposure

Proper exposure is key for stellar results. It is important that you don’t overexpose your shot as the extreme brightness of the sky will cause the image to look blown out.

When shooting with a standard camera, you will want to make sure you have the capability to shoot long exposures at high ISO settings. There are also Astro-Modified cameras that are much more sensitive than unmodified cameras. These will allow shorter exposure times for better, cleaner results.

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Focusing

You want to get a tight focus with your camera through your telescope when shooting deep sky photographs. If you have BackyardEOS, you can use the FWHM method that is built-in to the program.

Another popular option is to use the live view function right on your camera. Just turn your camera's ISO all the way up to the maximum until you see at least one bright, but out-of-focus star. Then, use the 10x zoom to manually rotate the focus until the star is as small as possible—this is a great trick to getting that focus you are looking for.

Deep Sky Photography Tips

These additional tips and tricks can help you get the best possible results with your photos.

- **1.** Seek out the dark sky. As a general rule when shooting nightscapes, you're looking for light from the moon. However, with deep sky photography, it's a little different. You want things as dark as possible, and that means avoiding moonlight and artificial light.

  If you can, try to shoot on New Moon weekends and go to as remote or rural of an area as possible—the end result will be worth the extra effort.

- **2.** Consider using LENR. Long Exposure Noise Reduction (LENR) is (what is it?). Some some people prefer to take dark frames at the end of a session by capping the lens, then subtracting the dark frames in "post-production." Try LENR instead. It takes a little longer to get the images, but the end result is much better.

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- **3.** Try some accessories. There are a lot of accessories that can make things easier when shooting deep sky photography. A remote release is a personal favorite, as it allows you to trigger the exposure without touching the camera. This will lessen your chances of causing vibrations and ruining the clarity of the image when you take the photo.

  A dew shield is another great accessory for shooting at night. It will prevent accumulating moisture on cold evenings from impacting your image. It also shields from reflections and dust.

- **4.** Use a laser finder to align the scope. Proper scope alignment is essential with deep sky photography, but it is often easier said than done. Attach the laser to the telescope to make it easier to align. While you're at it, make sure that you use a level (such as a bubble level you would use during construction) to ensure an even and level mount before alignment.

  While each of these tips is minor, the cumulative results can be out of this world...literally!

Section 4

Time-Lapse Photography

Section 4: Time-Lapse Photography

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"You don't take a photograph, you make it."

Ansel Adams

There are few types of photography that boast the drama and "wow" factor of time-lapse photography. Perhaps it is the fact that this style of photography is the antithesis of many of our busy, mile-a-minute lives—or maybe it is just how cool these photos look.

If you aren't already familiar with time-lapse photography, the best thing you can do is to go see some samples for yourself as there is no way to explain it in a method that will convey how amazing time-lapse really is.

However, if I had to put it into words, time-lapse photography is a technique that manipulates time so that you can depict something that would take days or hours to complete in a matter of seconds.

For example, a time-lapse of a sun rising and setting would include countless film frames that are captured at a lower speed and replayed much quicker to show the sun setting and rising in a matter of seconds, instead of over a 12-hour period.

Time-lapse photography is unlike any other form of photography and while it may seem entirely complex (especially when you see the final product) it is actually much easier than it seems. This is why I have created a how-to guide for beginners who want to learn the ropes of time-lapse photography and see how they can create stunning time-lapses for themselves.

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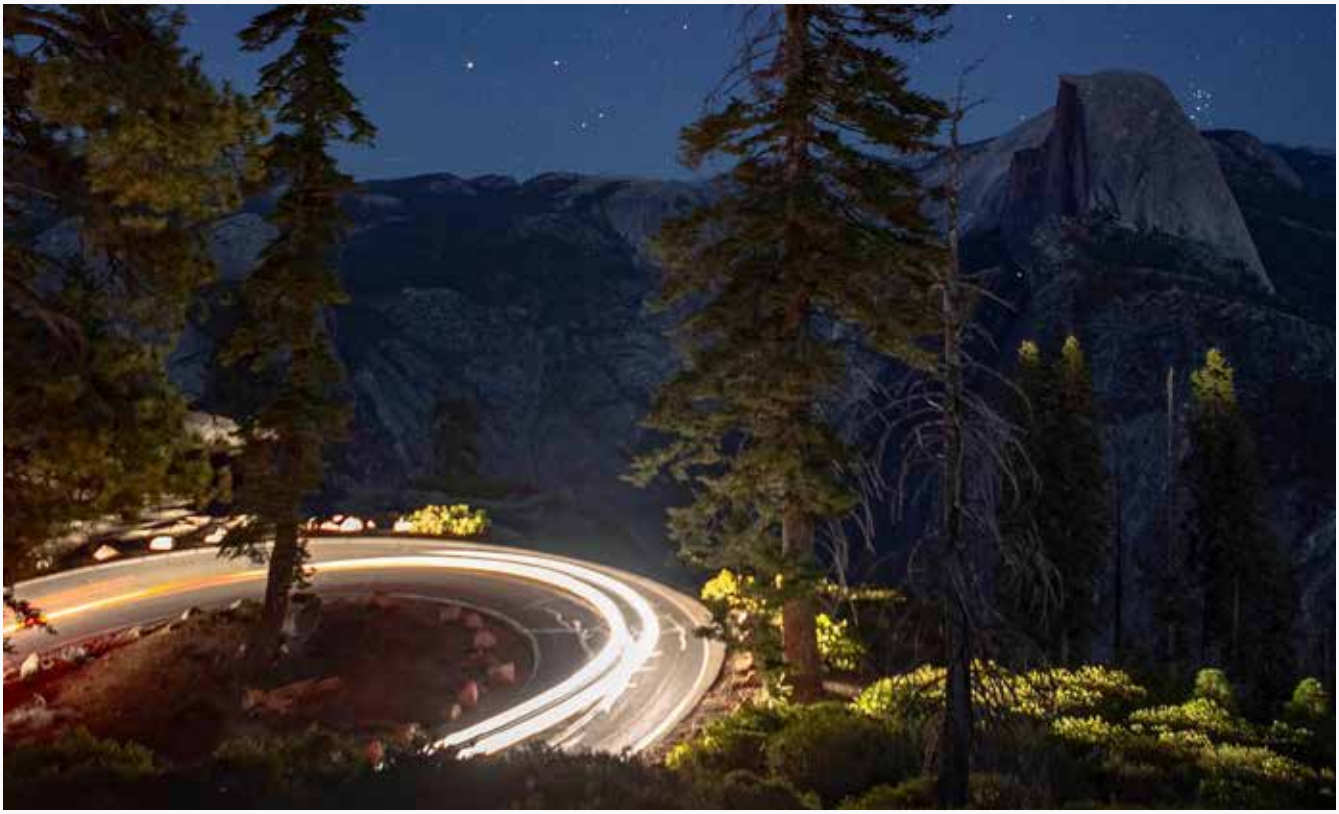

Gather Your Gear

Before you can start shooting this unique type of photography—you need the right gear. If you are already shooting with a DSLR (as many photographers are) then chances are you're already going to have a lot of the items you need. Just to be safe, here is a full rundown of the basic time-lapse gear, you will need to create these works of wonder:

Tripod

A great tripod is an essential staple of time-lapse photography. After all, you're not going to be standing there holding the camera for several hours, or days, while capturing your images. You need a rock-solid tripod that is very heavy and won't move. Don't overthink it , in fact the bigger the better—you just need something that is stable.

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Camera

Duh: you are going to need the right camera. A DSLR is great, and many people already use them for their other projects.
There is no one “right” DSLR out there for this type of photography.

Intervalometer

This is a tool that you may not already have in your arsenal of equipment, but it is one that you will need—and one you may actually use more than you think. The intervalometer is an automated camera trigger and is completely programmable.

In other words, you can use this simple device to capture hundreds of photos in precise intervals. There are some cameras that can have them installed via firmware, but if this isn’t an option with your device, you can buy an external intervalometer. There are many different products out there, in a variety of price ranges, depending on your needs.

ND Filters

ND filters may not be as necessary as some of the other items on the list, but they can help create a killer final product. These filters are meant to reduce the intensity of light without altering the color—kind of like shades for your camera lens.

Ultimately with ND filters, you can use a slower shutter speed in brighter environments, so that you can capture motion blur in a time-lapse sequence and in the case of time-lapse photography, motion blur can actually be a good thing.

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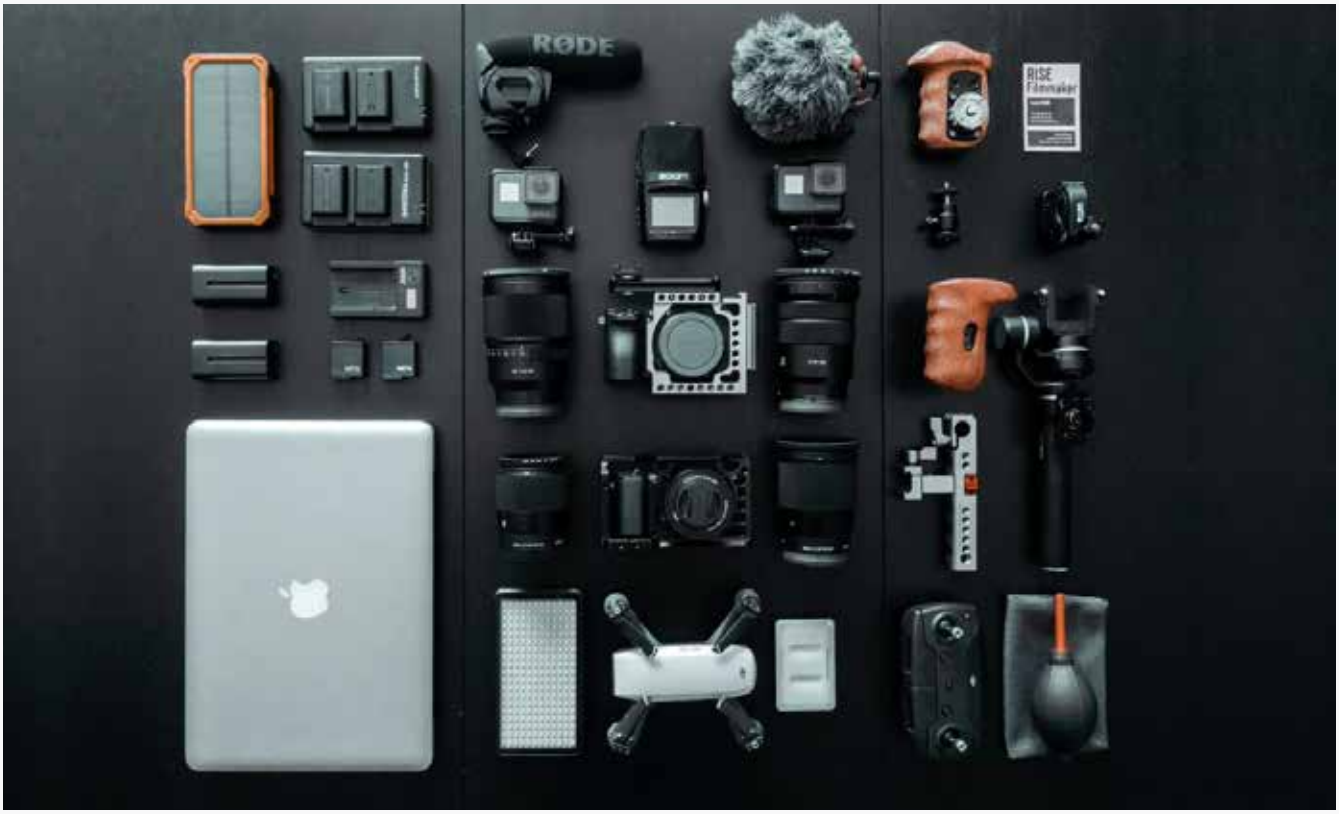

Necessary Accessories

In addition to your main gear, you are also going to need a few accessories as part of your time-lapse project. Make sure to gather all of the necessary extras ahead of time so you are ready to set up your shoot when the time is right. Here's what you need:

- **1. Battery Grip-** This is an accessory that can work with most DSLRs. This allows you to extend the size of the camera's battery compartment, so you can house two batteries instead of ones. A majority of time-lapse projects can be completed with one battery, but it is smart to have this backup as an option.

- **2. Extra Memory Cards-** Time-lapse shoots are long, and you are going to need more memory cards to hold everything you shoot, this can also help keep buffer times to a minimum.

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- **3. More Batteries-** Time-lapses require long shoots, which means you need a lot of battery life to cover them. This should be a no brainer, but it is worth mentioning—you will need extra batteries.

- **4. Card Readers-** This is an accessory that most people don't have but one that can really make your time-lapse project much simpler. When you do a time-lapse, you are going to be transferring a huge number of photos. So, instead of waiting for images to transfer, you can save yourself a ton of time with a card reader. Trust me, it will be worth it.

Shooting Time-Lapse Sequences

It's time to get to the meat of the project, actually shooting the sequence. Full warning—you are going to have a ton of photos, even more than you likely think. A lot of the fun part of shooting time-lapse sequences comes with editing and putting everything together, but you have to get some data first.

A guide to shooting time-lapse sequences could be dozens and dozens of pages. After all, there are so many different types of time-lapses you can shoot.

Before you get started you should be aware of some of the most common time-lapse intervals. The interval you select means how quickly the scene will appear in front of you in your final compilation.

While every project is different, here are a few common internal amounts:

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- **1 Second- Best for:** moving traffic, drives, quick-moving clouds/storms.

- **2-3 Second- Best for:** sunsets, sunrises, crowds, moon near horizon, sun near horizon, slow moving clouds, anything photographed with telephoto lenses.

- **15-30 Second- Best for:** moving shadows, sun moving across the sky without clouds, stars.

- **90 Seconds or Longer- Best for:** construction projects, growing plants, changing landscapes

  The following guide is a basic overview on how to do it and what to expect, you may need to engage in a little trial and error to really capture your ideal final product.

- **Fun fact:** Capturing the transition from Day to Night is aptly called a Holy Grail

Tips for Time Lapse Photography

Here are some additional tips for time lapse photography success:

- **1. Create a Composition—**Take your time to not only create an interesting scene, but think about an anticipate how that scene will change.

- **2. Choose a Program Interval—**Think about the speed and flow of action and consider the guide above as a reference. Once you've decided, make sure to program your intervalometer.

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- **3. Set Your Camera Exposure—** This of course depends on what you are shooting, but you will want to expose to minimize flicker and to create motion blur. Make sure you utilize manual mode to lock in consistent exposure and check your ISO, shutter, aperture, focus and white balance.

- **4. Do a Mini Time-Lapse Test—** Once you've done a mini time-lapse, mark the desired sequence for your intervalometer, then do a final tripod and camera stability check and you are ready to begin.

Putting it All Together

Now that you have all of the images you need, it is time to put it all together. Don't worry if you need to throw away some of your first tries--it takes a while to get the hang of it and capture shots without movement in them.

The best way to put together your time-lapse compilation video is to use a software program that is specifically designed for this time-lapses. Here are a few free options that are great for beginners:

Photolapse

VideoMach

VirtualDub

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There are also some great programs that cost a little more, but tend to have some more features. These include:

After Effects

LRTimelapse

Premier Pro

Quicktime Pro

No matter what you use, you can start to have some fun in putting these photos together and seeing your time-lapse come to life. It is important to remember that time-lapses can be tricky at first, and if your first attempt doesn't go as planned, just be ready to try again. It is not as easy to make adjustments in the field, so you may not see where you need to make tweaks until you get into the editing room.

“You will get all you want in life, if you help enough other people get what they want.”

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