

A FIRST CLASS OF LANDSCAPE PHOTOGRAPHY

Landscape photography is a favorite of both professional and amateur photographers. There awaits a wealth of natural landscapes filled with beauty and drama. To take good landscape photos, you need to master some basic skills and follow some fundamental rules. These skills and rules help you visualize where you want to go with an image when looking at a scene. Luckily there are not many skills and rules you need to concern about and we will cover them all in this handout. The most important of all is keeping up your passion for photography.

I. ENVIRONMENT

The following three factors are essential to take a satisfied landscape photo:

- Location

There is an old Chinese poem: From a thousand different positions, it takes on a thousand different appearances. The location could be the difference between an average shot and a stunning work. Always think about your scenes and find out where you should shoot from to make the most of them. If you don't know the area very well, get some advices from the Internet or local people. You could find something truly unique only by exploring the environment and experimenting with different view points.

- Time

The best times to take landscape photos are early morning (i.e., an hour after sunrise) and late evening (i.e., an hour before sunset). The light of "golden hours" is much more forgiving and it can be much more dramatic. On one hand, the angle of the light can impact a scene by creating interesting patterns, dimensions, and textures; on the other hand, you can usually get shots with spectacularly colorful skies.

- Surroundings

A landscape isn't just about nature, it can be complemented by a humanistic site, a machine, a natural

object, or people. We call this as the anchor of the image, which is a focal point that leads eyes into the image, or even reflects how a photographer thinks. Therefore, try to look for your anchor after making sure you're in the best spot and time. The following table presents a list of anchors (i.e., surroundings) under different scenarios.

Mountains and hills	Seas and lakes	Buildings
Boulder or rock formation, vehicle, metalwork, flower, etc.	Seagull, beach sandal, etc.	City symbol (e.g., statue, cab), flower, etc.

II. IMAGE COMPOSITION

Although there is no standard guideline for landscape composition, professional photographers would like to follow the six fundamental rules listed below.

- Orientation

There are two types of orientation: horizontal and vertical. Horizontal photographs are photographs that are wider than they are tall. Vertical photographs are photographs that are taller than they are wide. They can provide different views, allowing us to be more aware of our surroundings through peripheral vision. When shooting a mountain, horizontal orientation allows you to feature a wide view of the mountain and vertical orientation allows you to feature a tall view of the mountain.

- Rule of the thirds

To understand the rule of thirds, imagine there are four lines overlaid in a picture. Two are placed horizontally across the picture and the other two are placed vertically across the picture. These four lines create nine even squares. By placing your subject on one of the four intersections draws extra interest as it generates a pleasing layout. When a photograph is composed using the rule of thirds, eyes will wander over the frame.

- Horizons

The horizon must be straight in most shooting cases including mountains, hills, seas, lakes, and even buildings.

You can always straighten images later in post production on your computer. In addition, a compositionally natural spot for a horizon is on one of the third lines in an image, either the top third or the bottom one. Of course rules are meant to be broken, but most photographers find that unless it's a very striking image that the rule of thirds usually works here.

- Geometric lines, shapes and frames
One of the best ways into a shot is to provide viewers with lines, shapes, or frames that lead them into an image. The lines, shapes and frames also give an image depth and scale. They can be a point of interest as well by creating patterns in your shot.
- Symmetry
Symmetry divides an image into two, either horizontally or vertically, equal halves where both the halves of the image look the same or at least similar. Symmetry produces a sense of unanimity and harmony as it soothes eyes and mind of viewers. One application is to use water as a mirror. Water in subdued light can create beautiful effects and reflections. The best time for this kind of shot is during the golden hours.
- Foreground and background
One element that can set apart your landscape shots is to think carefully about the foreground and background of your shots and how to place your subject in them. For most landscape photographers, they consider the sky as the background. If the sky is filled with interesting cloud formations and colors, place the horizon lower in your shot; if the sky is bland and boring, place the horizon in the upper third of the viewfinder to prevent it from dominating your shot.

III. CAMERA SETTINGS

The following five techniques are essential to take a satisfied landscape photo:

- Focal lengths (angle of view)

Focal length is a measure of the distance from the center of lens to the principal foci on the image sensor in millimeters. It defines how much your view will fit in a photo. A higher number (e.g., 105mm, 135mm, 200mm) means a bigger zoom, while a lower number (e.g., 14mm, 16mm, 24mm) means the lens can be used for wider shots.

If you use a zoom lens, you can zoom in and zoom out to find the best angle of view to shoot. Wide-angle zoom lenses are preferred for landscape photography because they can show a broader view and therefore give a sense of wide open space. In addition, remember to try some interesting angles. For examples, you can get down onto the ground to shot from down low (low-angel shot), or you can find a higher up vantage point to shoot from (high-angel shot).

- Aperture (depth of field)

Aperture is a measure of the size of the lens opening in focal-ratio (f-number). It defines how much light the lens can capture. A larger maximum aperture (e.g., f/1.4, f/1.8, f/2.8) means the lens is capable of producing a shallower depth of field, which is the distance between the nearest and farthest objects in a scene that appear acceptably sharp in an image.

Although there may be times that you want to be more creative with shallower depth of fields in your landscape photography, a regular approach is to make sure that as much of your scene is in focus as possible. In other words, the foreground and background as well as your subject all look sharp. The simplest way to do this is to use the aperture priority mode (A for Nikon and Av for Canon) and choose a smaller aperture, i.e., a bigger f-number (e.g., f/8, f/11, f/16). Smaller apertures mean less light is hitting your image sensor so you have to compensate either by

increasing ISO value or lengthening shutter speed or both to get the same exposure.

- Shutter speed (capture movement)

Shutter speed is a measure of the length of time in seconds a camera's shutter stays open when taking a photo. The amount of light that reaches the image sensor depends on both aperture and shutter speed. A faster shutter speed (e.g., 1/4000s, 1/2500s, 1/1000s) can help freeze an action completely and make the subject look clear.

Although most people like the landscape photos being calm, serene, and still, those conveying movement can add drama, mood, and create a point of interests. For instance, wind in trees, waves on a beach, water flowing over a waterfall, and moving clouds. To capture those movements, you need to use the shutter speed priority mode (S for Nikon and Tv for Canon) and choose a longer shutter speed (e.g., 1/4s, 1s, 4s). Longer shutter speeds mean more light is hitting your image sensor so you have to go for a smaller aperture or a smaller ISO value or both to get the same exposure. During the exposure process, you need a tripod to avoid handshake and to ensure your camera is completely still. Sometimes, you also need to use neutral density (ND) filter to reduce the amount of light.

- ISO setting

ISO refers to the camera image sensor's sensitivity to light. A low ISO value (e.g., 64, 100, 200) takes longer to expose the same light than a high ISO value (e.g., 1600, 3200, 6400). But lower ISO settings show less digital noise than high ISO settings. In other words, lower ISO settings create much more clear and sharp photos.

In landscape photography, most subjects (e.g., mountains, hills, seas, lakes, and humanistic sites) are still, then choose lower ISO (i.e., <200). If the subject (e.g., wildlife) is

moving, then consider to increase your ISO to allow faster shutter speed so that you can freeze the moments.

- White balance and exposure value
For white balance, there are five main modes including auto, daylight, cloudy, tungsten light, and white fluorescent light. If you really have no idea about your situation, choose the auto mode; otherwise pick the most matching one. For exposure value, I always set it to +0 or +0.3 for landscape shooting. Remember to set this back to 0 as it will continue to effect all future exposures.

Last but not least, it is highly recommended to select the subject's optimal image characteristics (Picture Style for Canon DSLR and Picture Control for Nikon DSLR) to landscape mode.

IV. SUMMARY

The recommended steps for landscape photography:

1. Find out the best spot in golden hours
2. Look for the best background, foreground, and surroundings
3. Choose the wide-angle or all-in-one zoom lenses
4. Set the right white balance
5. Set the exposure value to +0 or +0.3
6. Set the subject's optimal image characteristics to landscape mode
7. Set the ISO value to <200 (for still shooting) or >800 (for moving shooting)
8. Go to aperture priority mode and set the aperture f-number to f/8 or f/11
9. Set the focal length by zooming in or zooming out to find the best angle of view
10. Place the subject on one of the four points of intersection of gridlines in the viewfinder
11. Aim the single focus point over the subject and press the shutter button halfway to activate your autofocus
12. Completely press the shutter button to take the picture