

hill and mountain
photography

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fine art black and white photography

introduction

Judging by the number of people you see there carrying a camera, the photography of hills and mountains has very wide appeal. What follows are a few hints and tips that I have picked up over 30 years or so of taking landscapes of hills and mountains.

Whole books have been written on the subject but here I will just give you a few bits of advice to help you refine your technique or maybe to progress from taking holiday snaps to the start of developing a personal photographic style. Either way you will hopefully end up with images that have wide appeal and greater artistic and emotional content.

why black and white?

Since most people see the world in full colour the use of black and white is one step removed from reality. This forces the viewer to consider such images in terms of shapes, patterns, brightness and tones, since colours become represented by shades of grey. As such it becomes a medium to convey drama and atmosphere which, after a bit of practice, allows the photographer to develop very different treatments which can be called upon as different situations present themselves.

Make no mistake, black and white photography allows great creativity, arguably more so than colour. For me, it is this creativity, especially in the darkroom, that appeals so much. I also try and inspire others, through my photography, to specialise in black and white and combine it with hill and mountain activities, or even just to see something in a way that they wouldn't otherwise be able to.

why hills & mountains?

So many people spend their leisure time in hills and mountains it is only natural that they will want to record their activities and achievements. As their level of competence increases a photographic style is developed and the combination of hill or mountain activity with photography becomes so much more.

In the past I seldom went out solely to take photographs, there was usually another purpose. Now that I make my living from the pictures that I take this has had to reverse and my life is arranged around either taking or selling my photographs.

I always carry a camera when I'm out on the hills ready for any shot that may present itself; my camera and tripod have become part of my normal outdoor gear to be carried at all times.

As far as my style is concerned, I try and convey a range of feelings or emotions through my

photographs. This varies according to the scene and the way I want to present it. Sometimes I'm looking for the grand view and the beauty of the scene. At other times I may look to portray the awesome or frightening nature of some mountains or, the way the same scene can change when taken at different times of the day or year.

composition

'Rule of thirds': This is probably the most useful guideline for photographers. It recommends that the photographer mentally divide the picture into 9 equally sized sections using 4 lines, rather like a noughts and crosses board. Placing important elements on either the lines themselves or the points where they cross one another often makes them more pleasing to the eye, in the final image. Be careful to use it as a guideline, it is not a rule and many fantastic images will not fit the grid!

People in landscapes: Some scenes work without people in them while others are improved by the scale that people give to an image. If you're not sure, try both and decide later. If included, an uneven number of people (1, 3 or 5) will give a more pleasing result than an even number but it very much depends on the arrangement of the people. Try and avoid an overlap of people in the shot or the result can appear confused or difficult to make out.

Here is a simple truism: The simpler the shot, the better it works. Don't cram lots of things into your images. Use your zoom lens, or change lens, to cover only what is important.

Lead-ins: Use these to take the eye of the viewer from the lower part of the image to the centre of interest (but not so far that it leads out of the sides or the top; this can weaken a picture!). Examples include walls, streams or mountain ridges.

Foreground interest: This is another important element to pictures. This can be something like a shapely rock or tree, grasses, a rucksack, in fact anything that adds to the rest of the image without overpowering it. However, whatever you include in the foreground it needs to be in focus so pay attention to the depth of field settings that you are using (see later).

Check the edges of the viewfinder: Before you press the shutter button look around the edges of the viewfinder for any distractions that you can remove by slightly changing your zoom, position or height at which you take the picture from. You may be surprised by how much you can improve an image just taking a few extra seconds to do this. If I'm unsure that I'm making the best of the shot in front of me I move around

and take it from different angles and with different foregrounds. Above all don't miss that moment - you may never get another one like it, and film and disc space is cheap compared to the cost of most mountain trips!

exposure

Using the correct exposure is essential. You can often make prints from poorly exposed negatives or digital image files but they won't have the same impact as one that is correctly exposed, something will have suffered at one end of the exposure scale or the other. The simplest way to set the exposure is to use the automatic setting on the camera. Unfortunately, this doesn't always work for film cameras and a degree of manual adjustment may be needed. For digital cameras the meters are usually excellent and a separate meter is unnecessary. Digital workers also have instant feedback in the form of image viewers and histograms so it is obvious at the time of taking whether adjustment is needed.

Film camera photographers:

Adjust for harsh lighting by taking the reading from mid-tones (grass and rocks in subdued light often fall into this area) or, if desperate, in high mountains with just sunlit snow everywhere use the back of your gloved hand (a dark coloured glove is best!) or blue sky (pointing the camera away from the sun). A separate meter can also be used and this is what I use all the time but the extra weight may be an issue. I always use it in spot meter mode and point it at suitable mid-tones or light shadows and average the readings.

Note: There is no light meter able to tell you what exposure to use for sunlit snow, or even the average scene. It depends on where you point the meter and relates to an 18% grey reflectance, not an easy thing to work out under normal circumstances let alone in the mountains! If all else fails start with the meter reading from the camera but add 2 stops and bracket around this exposure (especially important if using transparency film which is much less tolerant to exposure errors than negative film). Never point the meter towards the sun unless you want a silhouette with absolutely no detail in the shadows. Practice makes perfect!

The old adage for negative film users is to expose for the shadows and let the highlights take care of themselves. This is something of an over-simplification but indicates the importance of avoiding underexposing the shadow areas or there will be no detail to print for these areas on the negatives.

Digital camera photographers:

Use the light meter on the camera, matrix

metering in particular is usually reliable.

Expose for the highlights (light areas) in your subject. In a typical landscape this will give you details in the clouds in the sky but may give very dark or black shadows.

Expose for the shadows only if these are really important to the final image. Try and compose to avoid large white areas with no detail or they will be really distracting.

Use a polarising filter to darken the sky and help put detail into the clouds while holding detail in the shadows.

Use a graduated grey filter to darken the sky to allow detail to be held in the shadows.

Use a tripod to support the camera and take 3 exposures of the same scene separated in exposure by 1 or 2 stops. On a brightly sunlit day with deep shadows you will need 2 stop bracketing, at other times you can choose 1 or 2 stops depending on the scene. Most good digital cameras, especially SLR's, allow this to be set automatically.

The similar images from the bracketing exposures can then be combined in image editing software like Adobe Photoshop to give a final image with detail in the clouds and the shadows.

This is a technique that goes by the name of High Dynamic Range (HDR) photography. It is so important for digital photography that articles describing it seem to appear in almost every photography magazine every month!

lighting & weather

This is what really makes or breaks a shot. It is also what makes landscape photography so appealing to many. There is no such thing as the 'definitive landscape shot'. By this I mean there is always something different that can be seen so even the most familiar scene can provide an interesting subject. Weather and lighting can provide infinite variety so that even Striding Edge in the English Lake District can still produce striking new images even though it has been photographed many thousands of times in the past.

Often the most atmospheric shots are obtained just after a storm has passed so be ready and don't leave your camera wrapped up safely in the rucksack for too long! Also, don't be afraid to take shots when it is hazy. Some of the most effective landscapes are those taken on hazy days because it can emphasise the depth in a picture. When someone refers to a photo having good recession it is this depth that they are referring to. A series of mountain ridges fading into the haze can be stunning in the right lighting

conditions. Haze and mist can also hide clutter or distractions in the landscape, or simplify an image to make it more striking.

Taking photos directly into the light can produce some very powerful images with strong shadows. You can see several examples of this in my gallery images. The shadows will be longest and most dramatic when the sun is low in the sky (early or late in the day or any time in winter).

If the sun is included in the image it is best to stop the lens down to f22 to create a star-burst effect around the sun without the need for any special filter. Good quality lenses are needed for this to avoid excessive lens flare. If you intend to take this sort of picture then lens quality should be higher on your list of priorities when choosing a camera.

Landscape photography does give you time to set up your shot - most of the time. However, when the weather is changeable you need to be ready and work fast when the opportunity for a shot presents itself. Don't be afraid to take more shots than you intended to when you find a good viewpoint. It is often the case that one of my extra shots works better in the final image than the one I originally planned. By the time you are working on your images in the darkroom or on a PC it is too late to start wishing you had done something different.

depth of field

This refers to what is in focus from the front to the back in an image. It is often emphasised by putting something close to you in the foreground, like a rock, a tree, etc.

The impression of depth can be increased just by turning the camera around to make the picture vertical. The extra few inches from top to bottom in the print can be used to include more foreground through to distant background where this may not be possible in the more traditional 'landscape format' horizontal shots.

Another technique that can be used to increase the actual depth in a photograph uses something termed the hyperfocal distance. The theory behind this is irrelevant to most photographers as long as an understanding of how to use it is grasped. Your camera must have manual focusing to use it. So, if you only have auto-focusing you can skip the rest of this section! However, it is an easy technique to use on cameras with lenses marked with f-stops and distances to indicate depth-of-field. On modern digital cameras without these markings it needs an element of guess work.

Essentially, all that is needed for maximum depth-of-field is to set the lens to f22, or

whatever the maximum f-stop is for your lens. Then look at the lens markings on and next to the focus ring. There will be 2 marks for each f-stop next to the focus ring, one is beyond the infinity or focus mark (often looks like an 8 lying on its side) and another one on the opposite side of the scale for the closest focusing distance.

Turn the focus ring so that the infinity or focus mark is aligned with the maximum f-stop (22 for our example) marking painted on the lens next to the focus ring. If you now take your picture everything will still be in focus from infinity but you have increased the foreground that will be in focus. You can check this by referring to the distance shown on the focus ring next to the f22 mark. For example, maybe instead of having everything from 8 feet to the horizon in focus it will be everything from 4 feet to the horizon in focus.

In practice you may have to adapt this slightly to achieve maximum overall sharpness, for example aligning with the f16 mark instead of the f22 mark may give a sharper result overall but you have to trade off a small amount of depth-of-field in the foreground. Try it for yourself and find out what works best with your camera.

On cameras without these markings you need a bit of trial and error. Just turn the focus ring a small amount (a few mm), maybe make your own markings on the lens barrel, make some notes as you take photos and compare the results. You will soon be able to work out the best settings for your camera.

camera support

In order to get sharp photographs the camera needs to be supported in some way. A tripod is the best support and I hold the tripod steady when needed.

A cable release should be used if you have one or the self-timer can always be used instead. This avoids any danger of camera shake from me pressing the shutter when I need slow shutter speeds. Even I can be patient and wait 8 seconds before the shutter is fired!

If weight is not such an issue to you buy something a little more sturdy but be realistic about the total weight that you are able to carry in the hills.

If you don't have a tripod with you, or it is impractical to use one, then look around for what can be used instead, such as walls, fences, rocks, etc. In the absence of anything suitable then ski or trekking poles can be used. In this case pass your wrists through the loops and plant the poles in the ground a little bit in front of you. Push against the poles while holding

the camera firmly in both hands. With a bit of practice you start to think that you're a tripod! Gently squeeze the shutter button to avoid camera shake. I've regularly taken shots down to 1/30 sec using this technique.

The best tripods for landscape photography are made by Gitzo and Manfrotto. They are very sturdy, reliable and light. If you can afford a carbon fibre tripod these are the lightest of all so you will be more likely to carry them! They are a bit more expensive though.

You usually buy the tripod legs separate from the tripod head so that you can select the package that is best for you. For landscapes, avoid tripod heads with lots of levers and adjustment knobs. Personally I like ball and socket heads with just one or two tightening screws. If you are using it in the winter you need to be able to easily adjust the head while wearing thick gloves.

I would also suggest that you buy a quick-release tripod head to reduce the setup time before you can start taking photographs. In fast changing light you don't want to miss that shot of a lifetime!

infra-red

There are not many infra-red (IR) films available now so I describe here the use of Ilford SFX infra-red film.

Ilford SFX handles like conventional film and produces moderate IR effects.

It is available in 120 and 35 mm formats.

You must use a filter with maximum light transmission around 715 nm; a normal deep red 25A, for example, is ineffective.

Heliopan 715, Hoya 72 or the Ilford filter work best.

The greatest effects are seen when there is a blue sky with a few clouds, trees and grasses that give off IR, such as Aspens, Silver Birch, or willows. Conifers don't give off much IR.

In this case, the sky will print dark and the leaves on the deciduous trees will print light. In other words, it is as if you have used a red filter for the sky and a green filter for the foliage. However, shadow detail is typically greater than would be obtained with a deep red filter. The Glacier Gorge shot taken in Colorado is an example of an SFX landscape and has been used by Ilford for promotions for several years.

Infra-red can also be useful on hazy days since it cuts through it and can almost make it appear to be a clear day!

It is essential to use a tripod with SFX since, although the film is rated at ISO 200 on the box,

when the IR filter is used this needs an extra 4 to 6 stops of exposure, depending on how much IR is present.

In other words, an actual rating of between 3 to 12 ISO should be used.

I use manual adjustment of the exposure to add 6 stops to the exposure.

Use an aperture of f-22 or f-16 to avoid any focussing problems that will otherwise be seen (IR light focuses in a slightly different place to visible light).

Bracket exposures over a range of 3 stops or so since the recording of IR on film is rather unpredictable!

backpacking & photography

Without a tent (walking hut-to-hut in the Alps, for example) you will typically be carrying up to 15 lb. (7 kg). If you're camping these figures are probably going to be doubled.

This is already quite a bit of weight so your camera gear should be kept to a minimum if you want to enjoy the trip as much as possible.

Be ruthless in deciding what to pack and only take essential gear and enough film, batteries or memory cards for the trip (but there's no point in carrying a camera that you can't use because you have run out of film or batteries!).

mountaineering & photography

Moving across snow and ice, and climbing at altitude, requires a certain amount of essential extra hardware which could include crampons, ice axe, etc. So, the same principle applies about keeping weight to a minimum.

Above the snow line, it is likely that you will be wearing gloves a lot of the time so the camera needs to be easy to use. Small multi-function buttons, as found on many digital cameras, could prove impossible to press. One way to get around this is to pre-set the camera with the settings that you are likely to need such that you can just press the shutter to take your shots and not worry about scrolling down menus each time. If you know that where you want to shoot will be difficult to make camera adjustments, set the camera up beforehand.

When travelling on a rope with several others, such as on crevassed glaciers or steeper terrain, it is nigh on impossible and may even be dangerous, to get everyone to stop when you want to take shots. In this case pre-setting the camera, whatever sort you have, while moving along reduces the time needed to take shots. Even just a small amount of slack on the rope in front (when safe to have slack rope!) is all that is then needed to be able to stop for a couple of seconds and take the photograph.

Being at the end of the rope obviously gives the greatest scope for photography since you only have to worry about being pulled from one direction, at most.

Finally, it should go without saying that you should never compromise your own safety or that of others in order to make your photographs.