

How to Shoot Night Landscapes

You've all seen these images (I hope) and a couple of our members have exhibited a few. How are they done?

Most photographers tend to undertake their landscape assignments in the daylight hours, and the hours immediately prior to and after sunrise and sunset are often held up as the best time to get interesting light. However, more adventurous photographers will also find that many landscapes work just as well in the dark of night.

Photographing images at night by shining a torch ('flashlight') at your chosen subject using the technique known as 'painting with light' is actually a relatively simple process and, as a bonus, doesn't require lots of expensive equipment to achieve stunning results.

Shooting at night allows you to re-visit locations that you know, in daylight, have given good results, and then photograph them in a completely different and distinctive way. It also allows you to get out taking pictures on the short winter days and the process is surprisingly relaxing and enjoyable.

Planning

As with all photography, planning in advance on how to best use the available light to your advantage is paramount to taking good pictures. Despite being dark, a wonderful variety of lighting conditions are still possible and these will affect the images you produce. Weather conditions and light pollution are two such factors that can have a dramatic effect. For star-trails it's essential to pick a clear night, but that doesn't mean you should ignore cloudy weather. Although cloudy weather means you will not be able to record star trails, moving clouds can still make for some stunning pictures, particularly when they take on the colours of light pollution from built-up areas.

Before taking pictures you need to find a suitable subject or location. There is no point in looking for these in the dark, so ensure you seek them out during daylight hours. Try to pre-visualise how it will look in the dark. Go to the location and work out suitable compositions and carefully search the area for potential hazards such as a river or potholes, as these can be hard to see in the dark even with a torch (flashlight). You might also consider getting one of those small lamps that can be worn on the head.

Subjects that include a strong outline against a night sky work particularly well. Windmills, churches, trees, barns or rusty farm machinery all make for some fascinating images. By adopting a low viewpoint in our images you can then use a powerful night sky to add further drama to your pictures.

When in remote, dark areas there are basically three main light sources that can be utilised to illuminate your chosen subject: moonlight, flashlight and torchlight. (I'd better explain something..... it's a North American thing to get confused between Torchlight and Flashlight - why anybody would call a continuous illumination a *Flashlight* is beyond me, but then the word 'Strobe' seems to be used to mean 'Camera Flashlight' - and it's not, technically, a strobe either. So I'm going to keep using the words 'torch' and 'torchlight' - and when I call something a 'Flashlight' I mean the one attached to the camera).

Moonlight is probably the most powerful lighting source and it also has a dramatic effect on how our images will appear. Both torchlight and flashlight are great for lighting most subjects and offer a lot of control over what areas of the scene you wish to illuminate. With a torch it's possible to light just one particular subject or a small area in a scene. A good quality flashgun, meanwhile, will allow you to illuminate a relatively small section of an image with the bonus of being able to control the power output. When fitted with coloured gels a flashgun can add a splash of colour to scenes. Top quality, powerful flashguns also carry a large price-tag, though.



Field - A mix of flash, torchlight and car headlights lit this field. 17mins @ f/10, ISO 100.

Taking Pictures

Taking night pictures requires no more than a fairly basic kit. The essential items are a DSLR with a bulb facility, a lens, a sturdy tripod, a cable release or remote to lock open the camera's shutter and a light source to illuminate the subject.

It's good to arrive at your chosen location while it's still fairly light to give plenty of time to easily compose and set the focus on your camera before it's dark. When setting up, make sure your tripod is on secure ground before suspending your camera bag from the hook on the tripod, if it has one. This helps to steady the camera and also ensures that it is not going to blow over should there be a sudden gust of wind.

With long exposures digital noise can be a major problem so it's essential to keep the ISO as low as possible, usually around ISO 100 or 200. To reduce noise you could simply use Noise Reduction if your camera has such a facility. (Some cameras that have this facility only

apply it to JPEGs). This works well, though the downside is that the exposure time is effectively doubled while the camera takes a dark frame to identify noise (and if the exposure is really long, maybe over 20 minutes, you won't want to be loitering for too long on a cold night waiting for it). Because of this it's generally acceptable to use for exposures up to five minutes. For longer exposures it's better to turn it off and apply any required noise reduction in post-processing.

Once you are ready to take the image, lock open the shutter using a cable release or remote and take a note of the start time. While the shutter is open the next job is to begin illuminating your main subject using a torch or flashgun. Make sure you stand to one side of the camera and avoid walking into the exposing frame with a visible light source.

The amount of light your subject requires will depend on several things including the actual subject and the distance from your camera. For subjects such as windmills or barns you might need a mixture of flash and torch light. When painting by torchlight it's important to 'brush' your subject - use slow and even strokes without leaving the torch shining on a particular part of the image for too long. If the subject is more than 20 metres away from the camera then it will require considerably more light than you think. Getting the correct exposure requires a little bit of trial and error, so it's important to remember the length of the overall exposures and roughly the number of flash bursts or the amount of time you illuminated the subject using the torch. Once you feel you have given the subject long enough, then release the shutter or cable release lock and review the completed image on the LCD screen of your camera.



Lighthouse - small amount of cloud has added interest to this otherwise clear sky above Happisburgh Lighthouse on the Norfolk coast. 4mins @ f/5.6, ISO 200.

Step 1 Choose Your Composition

Arrive at your location while it's still fairly light to help you easily compose your images. When setting up your camera make sure that your tripod is on secure ground and that it's not going to move during the long exposure.

Step 2 Shoot RAW

By shooting your images in the Raw format you will be able to apply slight changes to your images at the processing stage. Small adjustments to white balance, exposure and noise can all be applied when converting the Raw files.

Step 3 Set Up Your Camera

Attach your cable release, set your camera to bulb mode and select your aperture. Finally, focus the lens on your subject, and once this is completed remember to switch to manual focusing so that the lens doesn't start to hunt once it's dark.

Step 4 Take a Test Shot

Once it's dark lock open the camera's shutter using your remote release and begin illuminating your subject by flash or torch light. Remember to take a note of the total exposure time and roughly the amount of light applied to your subject.

Step 5 Review Your Test Shot

Review your test shot and work out what areas need more or less light, as getting the correct exposure involves a little bit of trial and error. Once you have decided on what exposure changes to make, simply re-take the shot and keep reviewing the images until you get a result you are happy with.

Know Before You Go!

As with all paths of photography, half the battle of getting things right is good forward planning. Things to consider before setting out on a night shoot might include the following:

Check the Moon Cycle

The moon will have a dramatic effect on your images. A full moon will cut exposure times and make the sky appear more of a blue colour, almost like it's daytime; however, it will also reduce the number of visible stars. The moon cycle along with the moonrise and set times can easily be found for most locations on the Internet. The KPC website has times of moonrise but a little (free) program called 'The Photographers' Ephemeris' can be downloaded and you can find the azimuth and elevation of the moon for any location at any time. Make a note of this before checking out the location and take a compass to see exactly where you can expect to see the moon on a given date.

Check the Weather

Keep an eye on the forecast. Clear skies work well for star trails, but don't ignore cloudy or partly cloudy nights. The conditions to avoid are mist, fog or rain as the water droplets can settle on the lens surface during long exposures and are almost impossible to detect in the dark.

Take a Spare Torch

I often work in remote locations so I always carry a spare torch with me to find my way back to the car, particularly as my main rechargeable torch often runs out of power. I find a spare wind-up torch works well, as you are then not reliant on battery power. This is where a 'head'light can come in handy - many of the shops that supply hunters and runners will have a few.

Charge Batteries

Long exposures can quickly drain camera batteries so make sure they are fully charged and that you have a spare.

Light Pollution

While light pollution can mean it's harder to see as many stars, it can also add some much-needed colour to a sky. Light pollution will have the most dramatic effect on a sky when there is a new moon or the moon is yet to rise.

Star Trails

Star trail images are always eye-catching, but just like photographing images in the day you need to find a good subject and a good composition. While pictures of a night sky alone will result in good star trails, they will rarely work well if there is no subject matter to the image. For stunning images try locating the North Star in your composition, because as the earth rotates the North Star will appear to remain fixed while the other stars appear to spin around it. During long exposures we are able to record the motion of these stars in our images. [How to find the North Star](#).

Skies must be clear for capturing star trails, so avoid any nights when there is a chance of clouds blowing in.

Exposures for star trails can range from several minutes to several hours. The overall exposure length will depend on the amount of motion you wish to capture. One of the major problems with digital cameras during long exposures is that they are power hungry. With this in mind, try to limit your exposures to less than an hour unless you're using a battery grip with the facility to hold more than one battery at a time.



Star Trail Tips

Clear Skies

Clear skies are essential for photographing star trails so avoid nights when there is a chance of thick cloud blowing in during the long exposure.

North Star

By including the North Star in the composition you can capture the appearance of the other stars rotating around it.

Light Pollution

By shooting into the direction of the less populated areas you can eradicate any potential problems of light pollution from built up areas. Apart from the obvious places where there is heavy light pollution (along the 401 and Hwy7, Hwy15) Ontario is really not too bad - but for really good skies you'd need to be north of Madoc and up among the lakes - Algonquin Park is excellent. The very best place in Ontario that isn't actually wilderness is Manitoulin Island. Generally, though, from Kingston you won't do too badly once you're about 30km from the city.

Low Viewpoint

If you adopt a low viewpoint you can exclude elements such as cars from the composition, for more emphasis on the sky.



Turf Fen Drainage Mill, Norfolk Broads - 'A night when the moon had not yet risen allowed the sky to take on a warm colour due to light from nearby Norwich.' 8mins @ f/8, ISO 200.

Handy Hints to Help You Take Better Night Photos

Focus Using a Torch

To aid with focusing in the dark, shine a powerful torch on your chosen subject. Once your camera gets a focus lock, switch your lens to manual focus so that it doesn't hunt when you press the shutter button.

Compose Using High ISO

To compose in the dark, change the ISO setting to your most sensitive available then take a test exposure and recompose as required. Remember to lower your ISO setting back to 100-200 once you're done.

North Star

Take a compass with you and work out the position of the North Star. As the Earth rotates the North Star will appear to stay fixed and the rest of the stars will appear to rotate around it. See notes above for locating it.

Two's Company

Night photography can be quite spooky - and there are some varmints around that might be attracted to your lights - so having a friend with you will keep you company and make you feel safe.

Dress Warm

I don't need to tell Canadians that it can get very cold at night particularly when standing around waiting for long exposures, so warm clothing is essential. Still, I wouldn't want to be out in the countryside at night in -10 or worse.

Noise Reduction

If your camera has a noise reduction facility, turn it on for your final shot of the evening. Once the main exposure is completed you can pack away your camera while it's still exposing for the dark frame. When you arrive home it's exciting to view the completed image for the first time.

Night Landscape Photography Equipment

DSLR with Bulb Mode

To achieve successful night images that allow a long enough exposure to capture movement you will need to check that your camera has the facility to lock open the shutter using B or Bulb Mode.

A Sturdy Tripod

Exposures can run from minutes to hours so a sturdy tripod and head is crucial. For extra stability avoid raising the central column and if your camera has the facility to suspend your camera bag from it, use this to aid stability.

Battery Grip

Not essential, but if your camera can accept a battery grip it will allow you to use more than one battery in your camera at a time, so you can take longer exposures before the camera's power runs out.

Remote Release

A remote or cable release is essential to allow you to lock open your camera's shutter button over a long period of time and allow you to walk round the side of your subject to illuminate it with your chosen light source. Unfortunately, a lot of the remotes available do not have a shutter lock - but that is essential feature, or you'll be standing there for 15 minutes in the dark unable to take your thumb off the remote trigger. So investigate a remote shutter release for your camera from the manufacturers or from a knowledgeable retailer.

Light Source

A light source is vital to allow you to illuminate a subject. A flashgun that can be used off camera, and a powerful torch, will both come in handy. Remember to carry a spare torch with you to find your way back to your car.