

Shoot for the Moon

Monthly news and tips from
Landscape Photographer
Gill Moon



September 2020 Vol 9 - Filters

Hello

and welcome to the September edition of 'Shoot for the Moon'

A subject I often get asked about is use of filters for landscape photography. This can seem like a confusing topic as there are so many different options so I thought this edition should feature an introduction to the type of filters available and whether they are necessary to take good images.

I hope you will find issue 9 interesting and informative. I am always keen to receive feedback so please get in touch if you have anything you would like to share.

Remember to aim high, be inspired and shoot for the moon! Thank you and happy photographing

Gill

If you would like to get in touch please email me at gill@gillmoon.com

Filters for landscape photography



A stormy afternoon at East Lane Bawdsey. This image uses a 0.6 ND graduated filter and a 6 stop ND filter which enabled me to create a foreground which is all about colour and texture.

Making a good landscape photograph requires an eye for composition, and an understanding of light and how to use it. It also helps if you can get things right in camera as far as possible when you are out in the field. To achieve this I think filters should become an essential part of your kit bag.

In this month's Shoot for the Moon I am going to run through the range of filters that are available and talk a little about what each one is used for and how to get the best from them.

There are several types of filter that will make a massive difference to your landscape photography. They come in two forms screw on or slot in. Screw filters are circular and screw to the front of the lens. They come in a range of sizes and you will need to choose the correct diameter for each lens that you want to

use a filter with.

Slot in filters sit in a filter holder which attaches to an adaptor ring which screws to the front of the lens. Adaptor rings are fairly cheap and you will need to choose the correct one for the diameter of each lens that you wish to attach your filter holder to.

There are advantages and disadvantages to both these systems. At first glance screw filters may seem more convenient but they are prone to vignetting especially if you stack filters and you will need a separate filter for each different diameter lens that you own. They also do not work well as graduated filters and you will struggle to find a circular graduated ND filter on the market. This is because they are not adjustable - the graduation lies in the centre of the filter. So to use them you will

need to have your horizon in the centre of your image which limits creativity and composition.

For my photography I use a slot in filter system from Lee filters. This is composed of a filter holder, an adaptor ring which allows the holder to be attached to the lens and a range of resin and glass 100mm square or rectangular filters.



My camera with the Lee slot in filter system attached.

This system allows me to use a range of different filters on one shot. For example I can stack a graduated neutral density filter (ND grad) to balance the exposure between the land and the sky, with a polariser to cut the glare and boost saturation and a neutral density (ND) filter to enable a longer exposure.

Why use a filter?

There are many different situations where a filter might be necessary and these include:

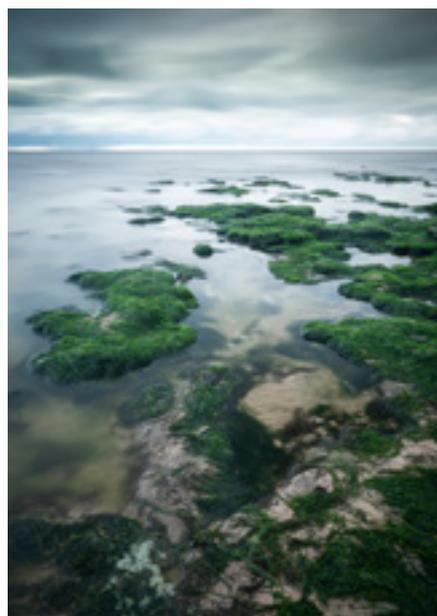
1. to balance the exposure within your shot. For this you would use a graduated neutral density filter.
2. to reduce the glare on water or foliage and to increase the saturation and contrast of a sky. For this you would use a circular polariser.
3. to reduce the amount of light hitting your sensor so that you can increase the exposure time and introduce the blurring effect in water, clouds or foliage. For this you would use a neutral density filter.



Shooting info: Nikon D850 with a 24-70mm lens at 24mm. F16 at 0.4 second, ISO 100.

The image above was taken on the beach at Bawdsey without the use of any filters. Whilst the land is exposed fairly well the sky is over exposed and there is no definition in the clouds. There is also a lot of glare coming off the water in the foreground pools.

To improve this image I decide to use a 0.6 (2 stop) ND graduated filter to balance the expose between the sky and the land. I also attached a circular polariser to remove some of the glare from the water and inserted a 6 stop neutral density filter (little stopper) to increase the exposure and blur the water.



Shooting info: Nikon D850 with a 24-70mm lens at 24mm. F16 at 33 seconds, ISO 100.

Did I need to use all these filters?

The dynamic range on my camera is pretty good so I could have rescued the sky a little but parts of the clouds are over exposed and retain no information so they will always look burnt out and un natural if I rely on post processing alone.

I could have replicated the effect of the 0.6 ND graduated filter in post processing by taking two images - one exposed for the sky and the other exposed for the land and then I could have combined them using layers in Photoshop. It would have been essential to have taken both images using a tripod so that their compositions were identical prior to combining them. I have used this method occasionally (although I would never substitute a different sky altogether) but for me I would much prefer to be outside taking photos that stuck behind a desk manipulating them for hours afterwards. So whilst this method works and is a good substitute for those times when you are traveling lite it is time consuming and requires a degree of skill.

I can also replicate the effect of the 6 stop neutral density filter by taking multiple exposures in camera. Most modern DSLR's will allow in camera multiple exposure. The idea is to take 4 or more shots when the water is moving and combine them in camera to form a single file. The motion of the water and the overlay of each image will create the blurred effect while all the static elements remain unchanged.

The only filter effect that cannot be replicated in post processing is the polariser.

Filter types and how to use them

When you are considering buying filters it is worth remembering that the quality of your image is only as good as the quality of the glass in or in front of the lens. If you have an expensive lens it would be a shame to put a cheap filter in front of it. Cheaper filters are likely to scratch more easily and can often give an unwanted colour cast to your images.

Neutral Density Graduated Filters

These are used to balance a bright sky with a darker foreground. They come as slot in filters in three versions - soft, medium and hard. This refers to the transition between the dark and light parts of the filter. Soft filters have a very gradual transition, medium filters have a slightly more pronounced transition and hard filters have a very obvious line between the dark and clear parts of the filter. Hard grads are best used where you have a clear horizon such as out to sea, soft and medium grads are much more useful for hilly and mountainous terrain where the horizon is less well defined.

Graduated filters also come in a range of strengths from 0.3 (1 stop of light) 0.6 (2 stops of light) , 0.9 (3 stops of light) and 1.2 (4 stops of light).

What is a stop of light?

If you are struggling with this concept it is worth taking a moment to think about this. A stop of light is a doubling or halving of the amount of light let into your camera when taking an image. If you increase your exposure by 1 stop you are going to let in twice as much light. If you change your aperture from F8 to F5.6 you are increasing the light in your image by 1 stop.

Similarly these apertures all represent a 1 stop increase in light F22, F16, F11, F8, F5.6, F4, F2.8

How to use an ND Graduated filter

1. Set your camera up on a tripod and take a meter reading for the foreground. Make sure that the foreground fills the frame and there is no sky in your shot.
2. Do the same for the sky and then work out the difference between the two in stops of light and select your filter.
3. Compose your image and slot the filter into the holder in front of the lens. Make sure that the boundary between the dark and light part of the filter sits on the horizon.
4. Expose for the foreground and take your shot.
5. Check your histogram and make sure that you are happy with the exposure.

Reverse ND grads

Reverse grads are used to shoot at sunrise and sunset when the brightest part of the sky falls on the horizon. These filters have the darkest band in the centre and gradually get lighter towards the top of the filter. This ensures that the light is held back in the brightest part of the sky without over darkening the top of the image.

Use this filter in exactly the same way as you would any other graduated filter.



0.6 reverse graduated filter with the darkest band in the centre of the filter.



Shooting info: Nikon D850 with a 24-70mm lens at 42mm, F16 at 7 seconds, ISO 200. Shot using a 0.6 reverse ND filter and a 6 stop ND filter.

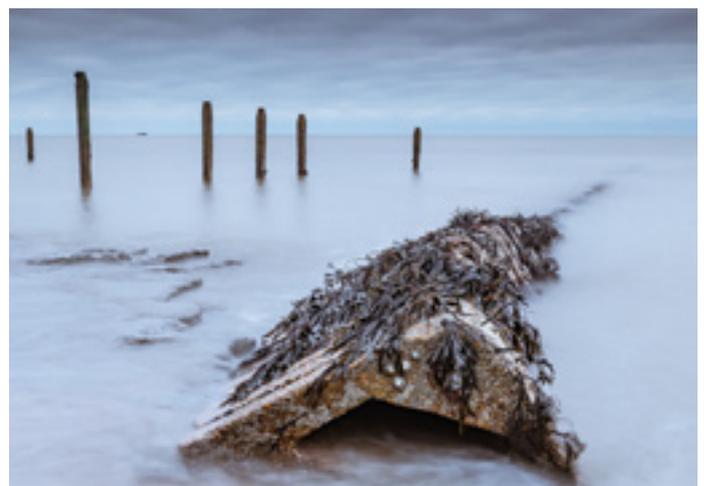
Neutral Density Filters

Neutral Density filters come in two forms - fixed and variable.

Fixed filters are in a square or rectangular format and slot into a filter holder which attaches to an adaptor ring on the front of your lens.

Variable filters are circular and screw onto the front of the lens. They can then be rotated to change the strength of the filter.

Neutral density filters come in several sizes including 3 stop, 6 stop, 10 stop and 15 stop. Each stop halves the amount of light reaching the sensor so using these filters you can achieve long exposures even on a really bright day.



How to take long exposure shots.

For any long exposure shot you will need a tripod, your filters and a remote shutter release.

1. Begin by setting up your camera on a tripod (and attach your remote shutter release if it has a cable) Now set up your composition. I usually start in aperture priority and select my aperture and take a test shot. Check the exposure and note the shutter speed.
2. Lock your focus and add your filter. If you are using slot in filters the neutral density filter sits in the slot nearest to the lens and any other filters go on the outside of this.
3. Switch your camera to manual mode and select bulb.
4. Using the shutter speed from your test shot use an app like Long Exposure Calculator or the Lee Stopper exposure guide (which is my preferred calculator) to calculate your exposure time. Both these apps are free.
5. Check your histogram and retake the shot if necessary adjusting the exposure time accordingly.



Shooting Info: Nikon D700, 24-70mm lens at 44mm. F8 at 50 seconds using a 0.6ND grad and a 10 stop ND filter.

The shot above of Southwold Pier was taken using a 10 stop ND filter. The 50 second exposure has rendered the sea milky and flat with very little texture which has the effect of simplifying the image.



Shooting Info: Nikon D700, 24-70mm lens at 24mm. F16 at 2 seconds using a 0.6 ND grad and a 6 stop ND filter.

The shot above was taken at Bawdsey Beach and uses a 6 stop ND filter to slow the exposure. This time I wanted to retain some texture in the moving water and introduce some trails around the rocks as the tide advances and retreats.

It is possible to duplicated the textured effect seen in the shot above using multiple exposures instead of a filter. The shot below was taken using in camera multiple exposure with a series of 3 images all shot at the same aperture and combined in camera. Because the water is moving it will be different every time the shutter is opened so it will create the textured effect seen in the image. The solid elements of the composition will always remain the same and so won't change when the images are combined.



A Polarising filter

A polariser is a filter which changes the way the light travels to the camera's sensor. They are usually circular and screw onto the front of the lens. They are invaluable for darkening and adding contrast to skies, particularly when clouds are present. They also remove glare from foliage and water and enhance colours. They are great for using in general landscape photography as well as in woodlands particularly when dealing with wet vegetation.

Polarising filters works best at 90 degrees to the sun. Set up your composition attach the polariser and then turn the front ring on the filter. This will adjust the polarising effect and you will need to turn this to achieve the desired result. If you are photographing blue skies it is possible to over polarise and you will then get a sky with a dark blue patch in the centre of the frame. Watch out for this and just adjust the polariser to reduce the effect.

The effects of a polarising filter cannot be replicated in post production so if you are only going to buy one filter then it should really be this one.



Shooting Info: Nikon D700, 24-70mm lens at 24mm. F16 at 18 seconds using a circular polariser and a 6 stop ND filter.

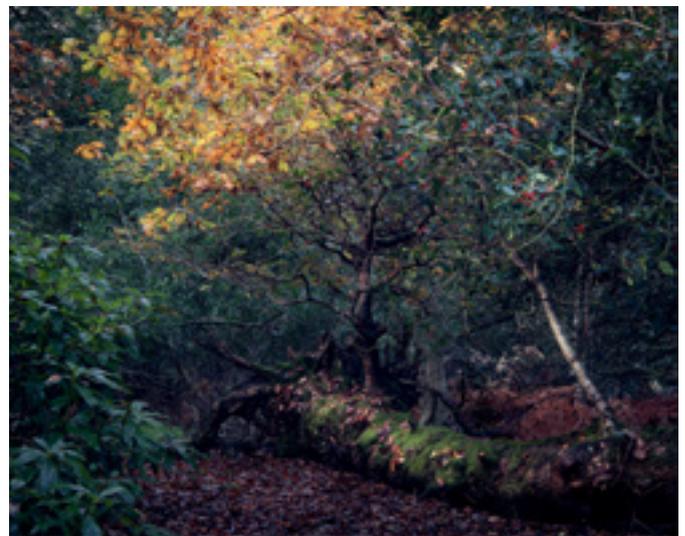
Polarising filters are not just useful for boosting the contrast in skies they are also

invaluable in reducing the glare on foliage.

The following shots were taken in the rain at Staverton Thicks. The only filter I used for these was a polariser which removed all the glare from the wet leaves and enhanced the colours of the autumn foliage.



Shooting Info: Nikon D700, 24-70mm lens at 31mm. F11 at 1 second, ISO 100, polarising filter.



Shooting Info: Nikon D700, 24-70mm lens at 50mm. F14 at 4 seconds, ISO 100, polarising filter.

Inspiration

Jay Vulture is a London based black and white photographer who specialises in daytime long exposure. His images are beautifully composed and clean in style. www.vulturelabs.photography/longexposuregallery

Darren Moore is a self taught photographer living and working in Surrey. He specialises in daytime long exposure, many of his images have exposure times of between 30 seconds and 15 plus minutes. www.darrenmoorephotography.com

September challenge

Using variations of shutter speed shoot a series of images showing the following:

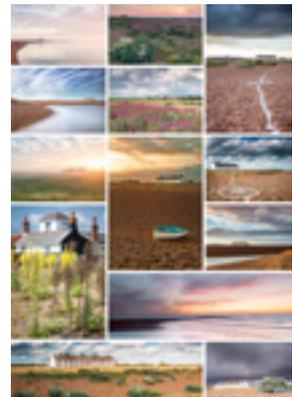
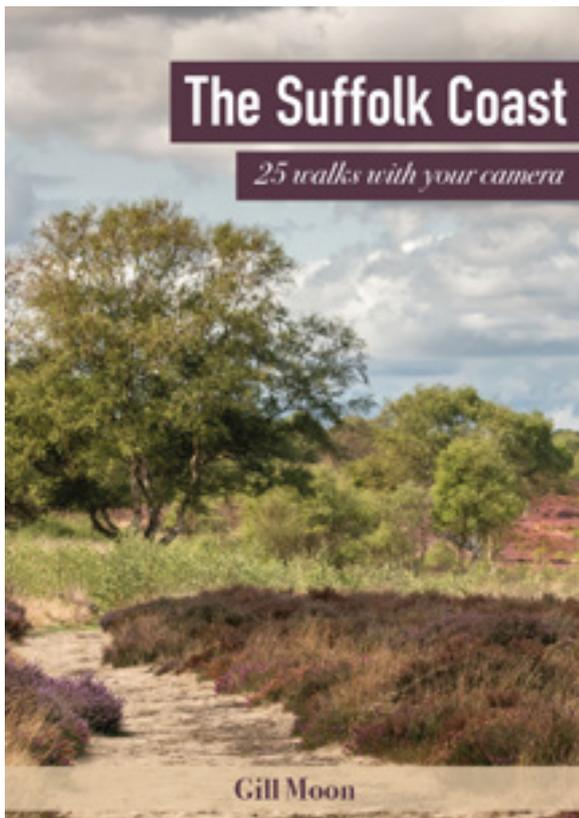
1. Movement in the landscape - this could be through the use of a second or 2 second exposure to show movement in clouds, vegetation, water or people.
2. Calm and tranquility - perhaps using a long exposure of more than 30 seconds to simplify

3. The texture of water - using a 2 to 5 second exposure show movement in water. Alternatively use in camera multiple exposure to exaggerate the texture of moving water.

I am really happy to offer feedback and would love to see your images so please get in touch gill@gillmoon.com



Walking with your camera



My new book "The Suffolk Coast, 25 walks with your camera" is out now.

The project which comprises the book and a series of free photography walks around the Suffolk Coast has been undertaken with funding from the Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB) via their Sustainable Development Fund and Amenity & Accessibility Fund. It is hoped that the walks will take place from July in small groups of 5 to comply with current social distancing guidelines.

The walking book consists of 25 walks ranging in length from 2 to 6 miles and cover some of the most beautiful parts of the Suffolk Coast. Each walk comes with route directions, a map, route notes, local information and a photography scavenger hunt for each location. The walks can be undertaken with any camera from a phone camera to a DSLR and are all about observation and connecting with your surroundings.

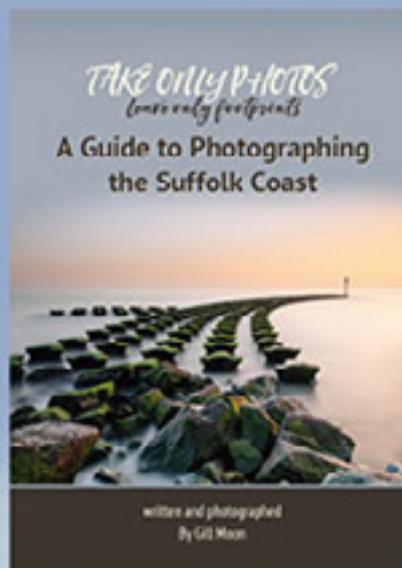
Orders are now available from my website
www.gillmoon.com/product/the-suffolk-coast-25-walks-with-your-camera

For more information about the Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB) please see their website www.suffolkcoastandheaths.org

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These Guides have been produced with funding from the Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB) via their Sustainable Development Fund and Amenity & Accessibility Fund



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