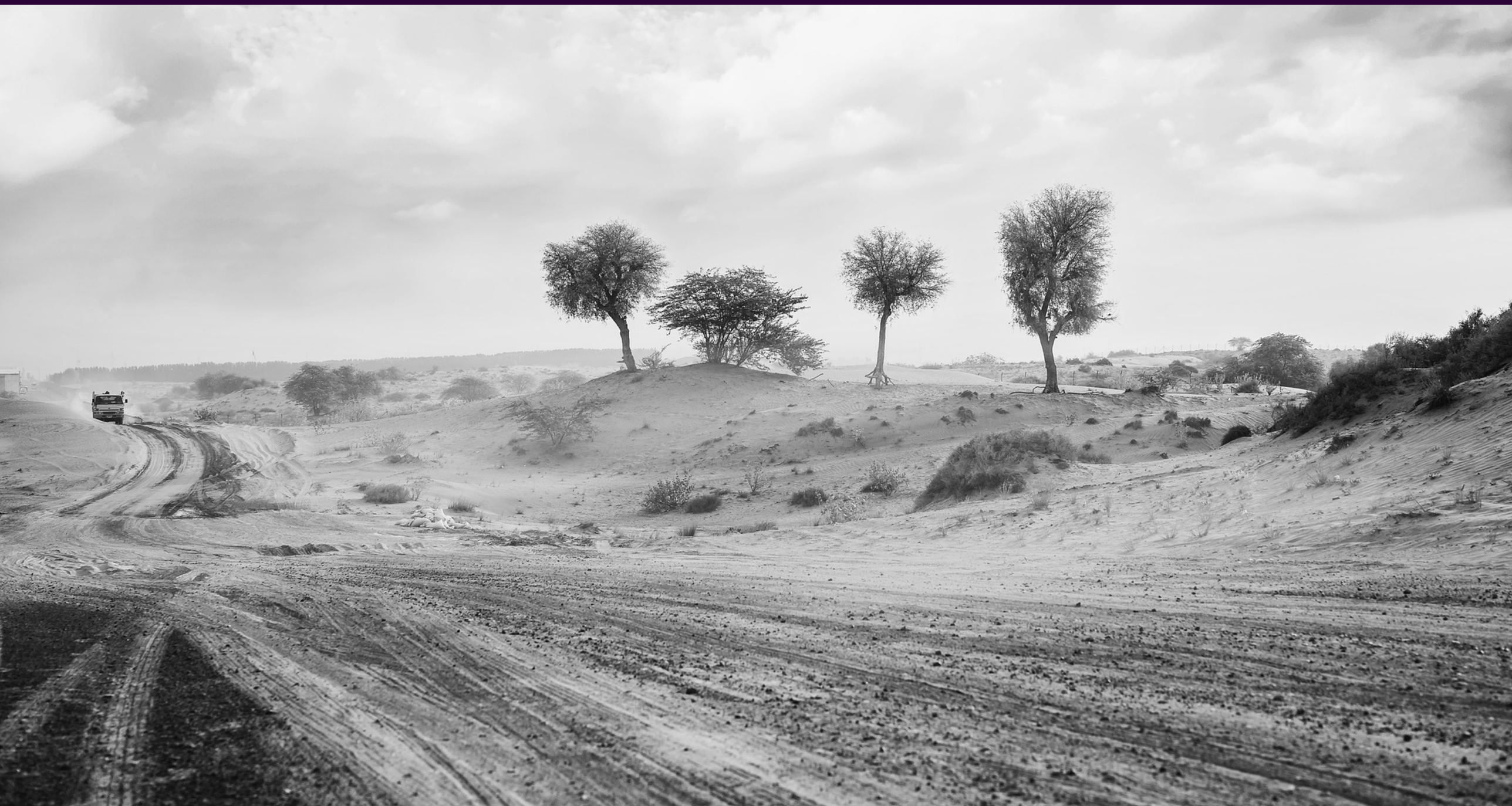
Photzy

3 TIPS FOR DEALING WITH BRIGHT SKIES IN LANDSCAPE PHOTOGRAPHY

Quick Guide

Written by David Veldman



There are a few problems that all photographers can sympathize with: corrupted memory cards, leaving the lens cap on, low batteries. At some point we all experience these little issues that challenge or merely annoy us.

Today I'd like to talk about a very common, but important challenge: dealing with bright skies in our landscape photos. By the end of this tutorial, you'll find that like most common frustrations this one can be surmounted with a bit of planning.

As a new photographer, I distinctly remember facing this challenge early on.

I had snapped a shot of a lovely vista, and when I returned home, I found that while my landscape itself was well exposed, my skies had vanished into a white blur.

This was frustrating, as the cloudy sky had added a great deal of drama to the image.

I immediately recognized the basic issue: my camera was metering for the darker parts of the scene, and in doing so had blown out my highlights.

Unfortunately, at the time, I was unsure as to how I should combat this. If you've ever found yourself in that situation, this tutorial is here to help you.

First, a bit of background on what causes this phenomenon.

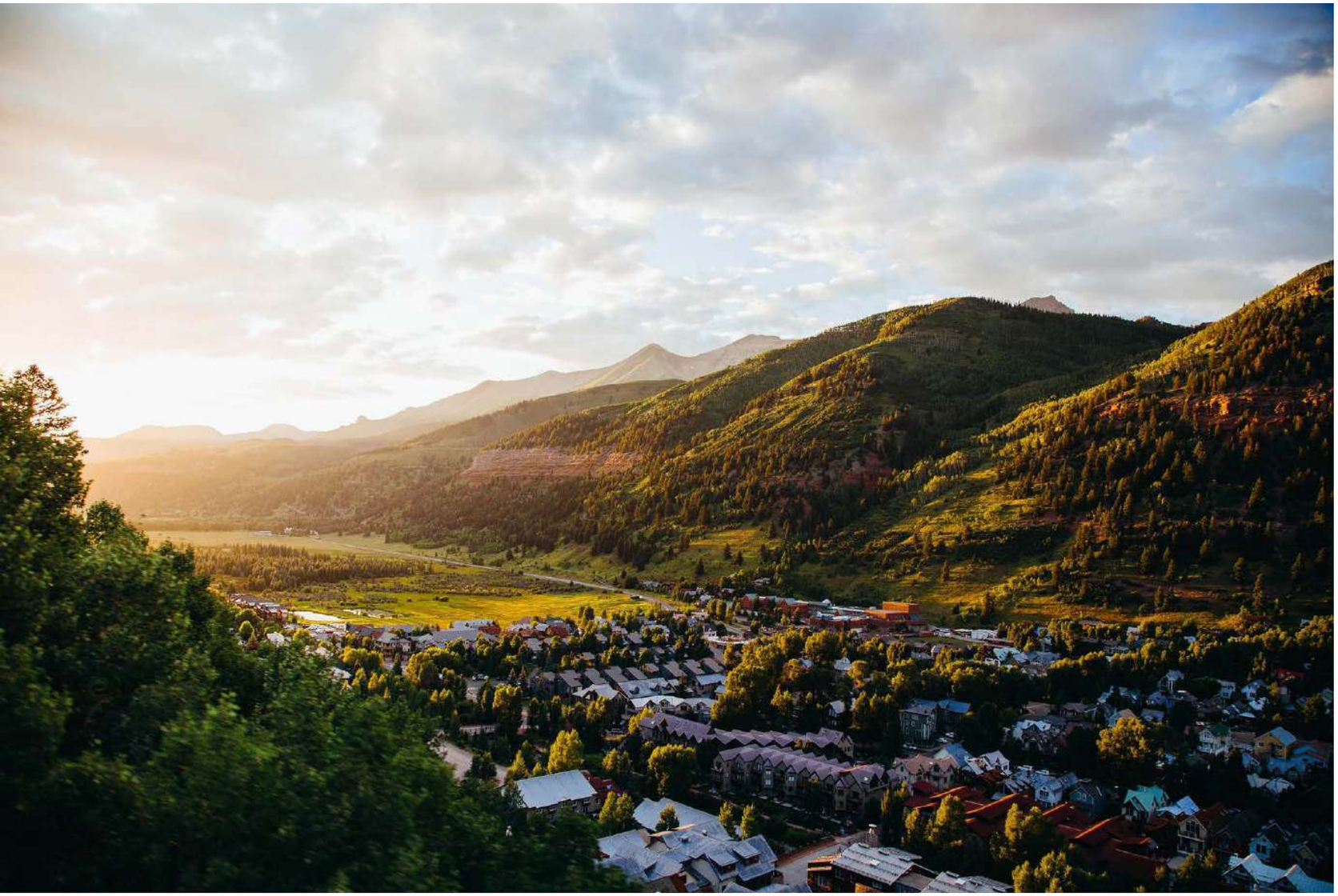
The most important term that you need to understand is 'dynamic range.'

Dynamic range refers to the limit of light values to dark values that a camera is capable of capturing.

Think about standing outside in bright sunlight and then trying to look inside of a shadowy room. Your eyes will have difficulty picking out detail in the shadows. A camera suffers from the same issues. In such a scenario, you would essentially have to choose between exposing for the outdoor lighting (bright values) and exposing for the indoor lighting (dark values).

Fortunately for us, the human brain performs complex computation that tricks us into thinking we have better dynamic range with our vision than we actually do!

Different cameras have different levels of dynamic range. Typically, high-end, or professional-level, cameras will possess the ability to capture a wider dynamic range. Luckily, for amateurs, technology has trickled down over time, meaning that most cameras today are miles above their earlier predecessors.



Next time you decide to spend money on a camera, be sure to research its dynamic range capabilities. While not as well published as megapixel counts or burst speeds, the information is generally readily available.

Before I begin with my three tips, I want to point out that, while I will be focusing on landscape applications, these techniques are valid for all forms of photography. Controlling dynamic range is a valuable skill that applies to every discipline.

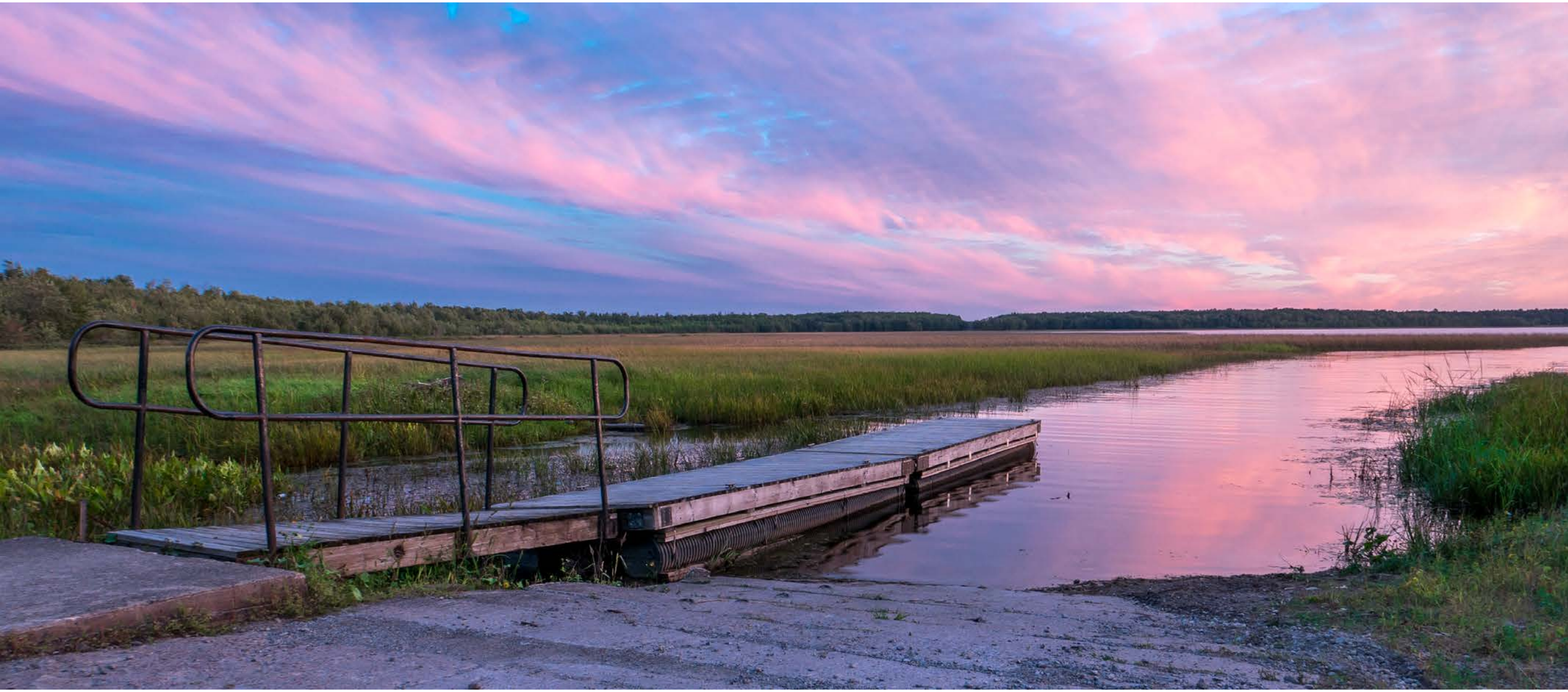


Photo by David Veldman

POST-PROCESSING

I'm going to start off with the most basic technique – using post-processing to help negate the effects of limited dynamic range. As I mentioned earlier, every camera is different, and some will benefit more from this particular method than others.

The first step in this post-processing workflow lies within your camera. If possible, you should set your camera to capture "raw" files. Most cameras, and even some cell phone cameras, allow "raw" capture.

Simply explained, raw image files are the 'digital negative' obtained by reading out the sensor data from your camera (without any in-camera alterations).

Many of us, myself included, began taking pictures in the .JPEG format. While JPEGs are easy to manage due to their size, and even easier to share online, they are a compressed format that is difficult to edit without creating artefacts.

Raw images, on the other hand, are a larger file size, and cannot be opened or shared without first processing them in specialized software.

While this may sound intimidating, learning to shoot, and process, raw image files is an important step in your photographic journey – so if you haven't done it yet, now is as good a time as any!

Raw image file editors vary widely. Lightroom is a common program for editing and cataloging photo image files, but you can also download free programs like Raw-Therapee or GIMP.

> **Recommended Reading:** This tiny section on post-processing could easily fill a book. To discover even more in-depth techniques and easy-to-understand explanations on processing raw image files, check out Photzy's premium guide, The Ultimate Guide to Fundamental Editing.

Even if you shoot raw image files, there are limits to what a camera can capture.

Therefore, you must make the best use of your cameras imaging sensor by understanding the nature of digital imaging.

Digital sensors tend to do very well at recovering details in the shadows, and they struggle to retain highlight information (when clipped beyond a certain point). This means that, in most cases, you should expose your image slightly to the left (to the left on

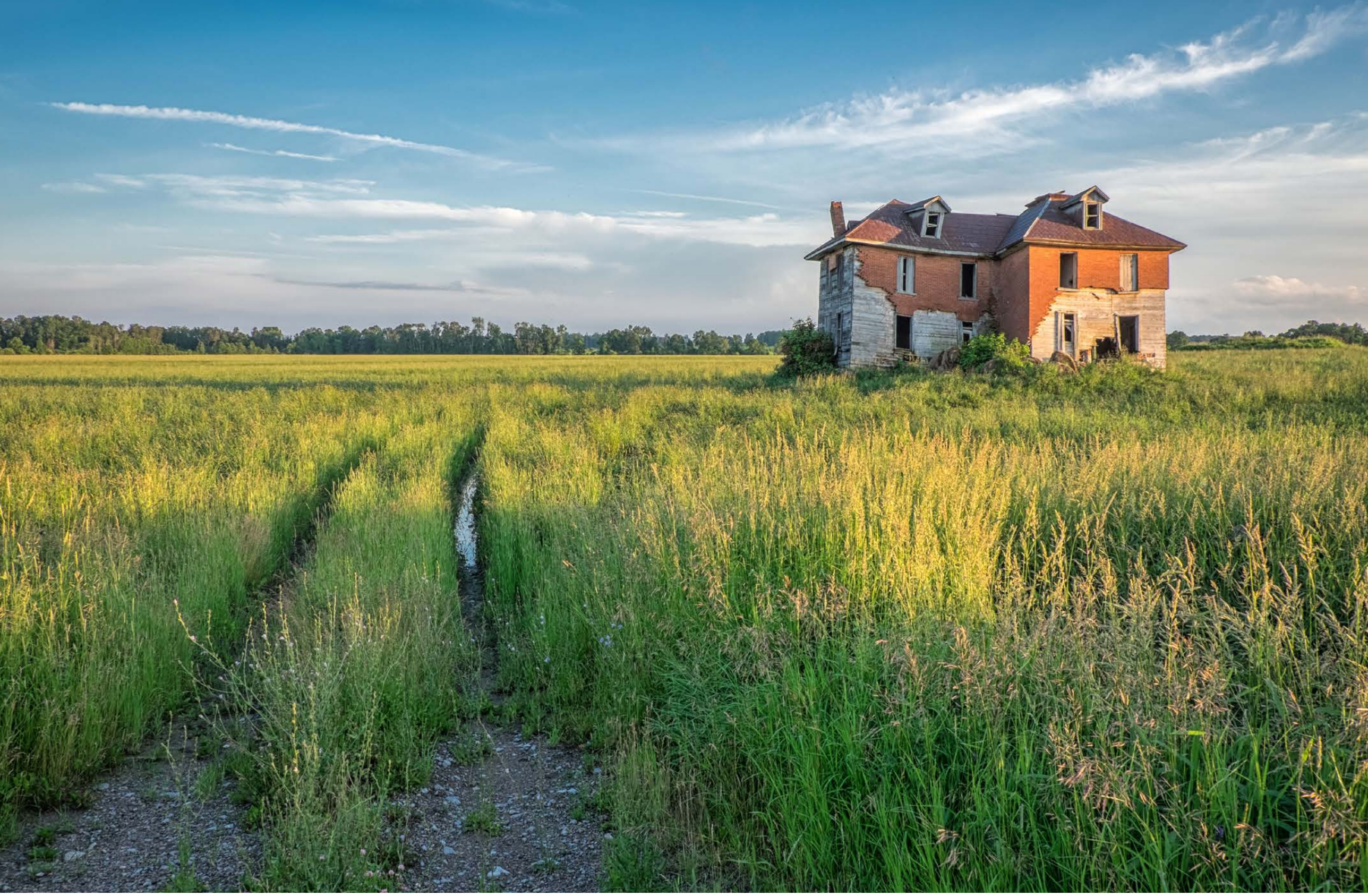


Photo by David Veldman

the histogram), essentially underexposing. While your shadow areas will appear dark, your highlights will be preserved.

Yes, I know that many claim that you must shoot to the right. In my experience, for landscape photography, when dealing with a dark foreground and a bright sky, I recover (in post-production) a fuller range of tone by exposing slightly to the left (underexpose) on my histogram. This is my experience and opinion.

With your carefully exposed raw image file loaded into your photo editor, the next few steps in post-processing are a breeze, thanks to modern technology.

There are many different options to finalize your image. You could raise the shadows and lower the highlights, you could drag on a graduated filter that darkens only the skies, or you could paint in a filter using a digital brush.

There are many options, but they vary depending on your choice of photo editing software. Take the time to research the options available to you.

In the image on the previous page, I made a few choices in-camera. I shot a raw image file. I kept the sun to my back and I underexposed the image, confident that my camera could recover the shadows easily.

In Lightroom, I only had to raise the shadows a little, and the image pops as a result.

The concept of altering images to deal with dynamic range is hardly exclusive to digital photography. Ansel Adams, the legendary landscape photographer, made extensive edits to his photos by selectively under and overexposing areas of his photographs by printing them in the darkroom.

Mastering these post-processing techniques will prove invaluable to your photographic efforts.

Recommended Reading: If you're interested in improving your post-processing workflow, check out Photzy's premium guide, Understanding Masking.

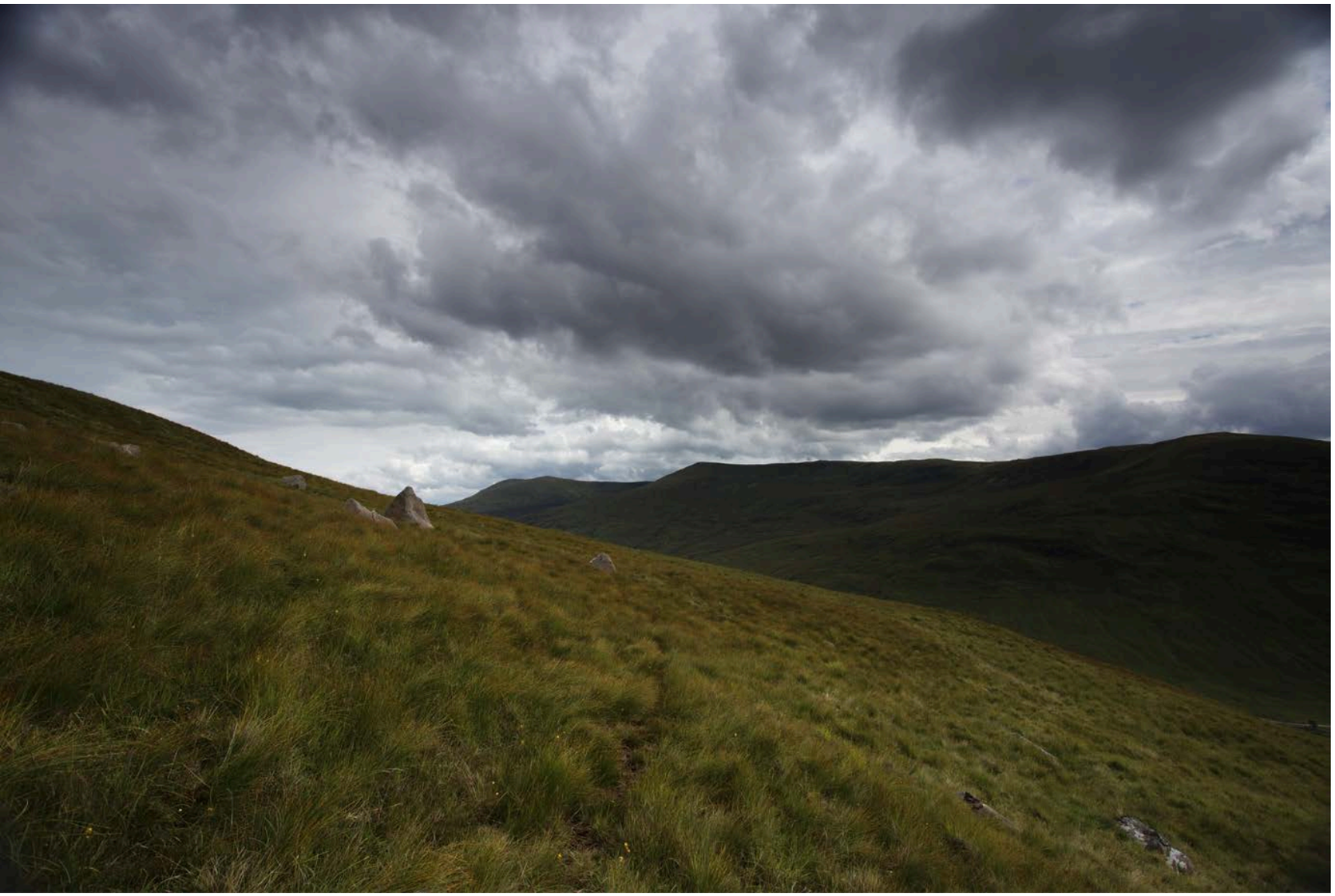


Photo by Mark Longair

GRADUATED NEUTRAL DENSITY FILTERS

As useful as post-processing is, there are disadvantages to it.

In some cases, heavy post-processing can degrade image quality, leading to unpleasant distortions or banding. The easiest way to avoid this issue is wonderfully simple: the graduated neutral density (GND) filter.

Neutral density filters are an essential piece of gear for every landscape photographer. They are, quite literally, just a dark piece of glass that allows less light to pass through the lens.

This allows the photographer to use a wide aperture or slower shutter speed.

Graduated neutral density filters are much the same, except that they are only dark in one part of the filter and clear on the other end.

There are many kinds of GNDs. Some have a very pronounced effect while others are subtler. There are hard-edge GNDs, which have a very harsh border between the transitions from light to dark, and then there are soft-edge GNDs, which provide a more gradual transition between the two sides.

Most photographers buy their GNDs in a set, which allows a few options to choose from depending on the scenario that you are photographing.

Used properly, a GND will allow you to mute the intensity of the harsh light from the sky, thereby decreasing, or eliminating, the need for post-processing “fixes.” Not only does this ensure that your images do not distort from digital correction, but it also saves time!

If you prefer to do things in-camera, or simply don’t enjoy messing about on computers, a graduated neutral density filter is the tool for you.

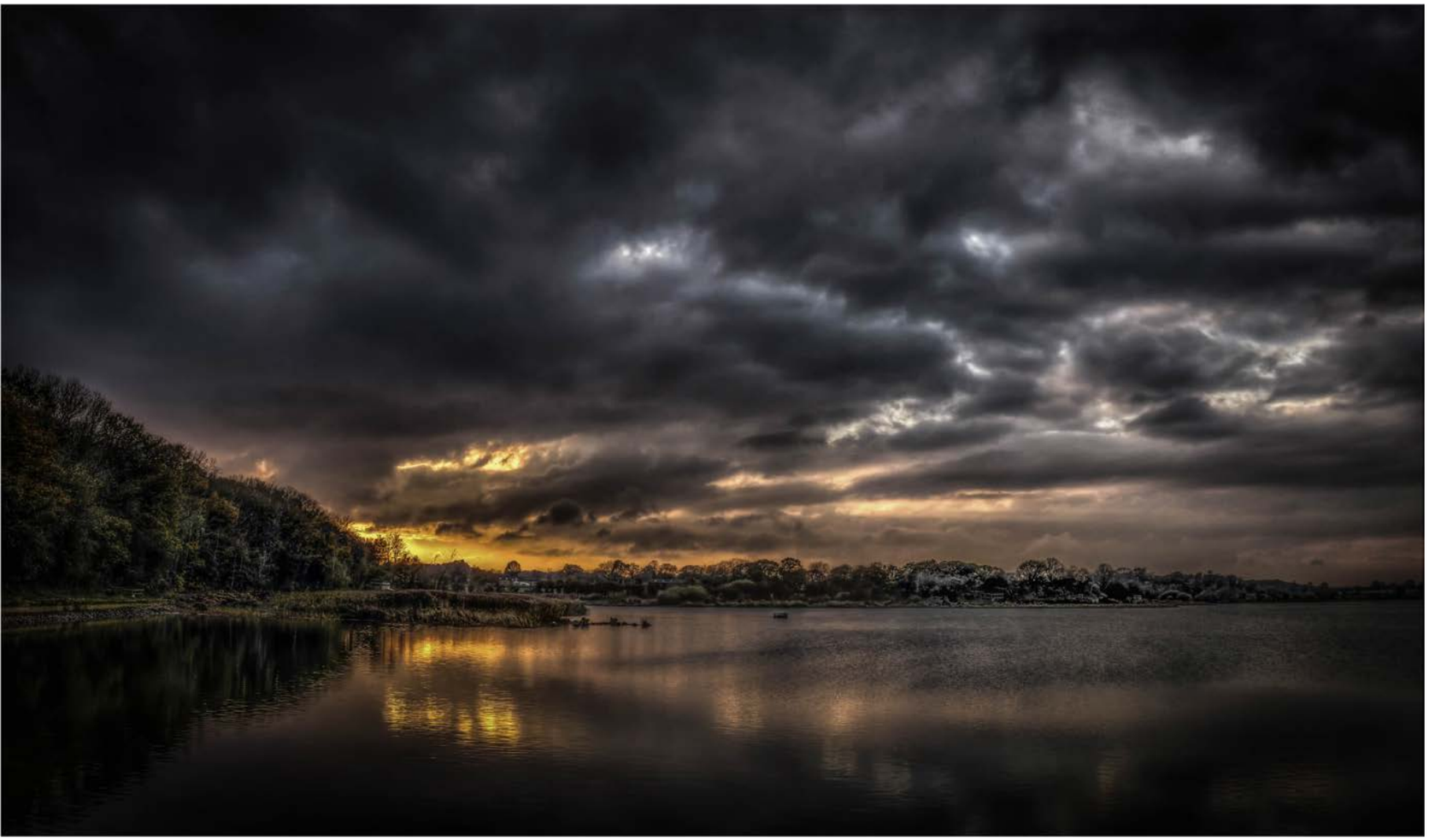


Photo by Mark Freeth

HDR

You'll recall, in my introduction, that I mentioned the term 'dynamic range.' That important concept is the backbone of this last, fascinating technique.

HDR, short for High Dynamic Range, is a method by which a photographer can overcome almost any extreme difference between the light areas and the dark areas in an image.

In many photographic circles, the term HDR has achieved a bit of a negative connotation. This is because, like any post-processing technique, it can be abused. Done properly, HDR is an invaluable tool to combat bright skies in your landscape photography.

Although creating an HDR image can seem a bit daunting, the theory behind it is actually quite simple.

An HDR image is simply multiple exposures combined together. In its simplest form, you simply place your camera on a tripod and capture an

underexposed image, a properly exposed image, and an overexposed image. By adding all of these images together, you can achieve a far greater dynamic range than is possible from a single image.

There are many ways to go about this. Certain cameras, and cell phone cameras, can perform the entire process for you, with a single press of a button.

Most cameras require that you activate the 'bracketing' function, which automatically under and overexposes some image frames for you.

In some cases, you may even have to manually set your exposure.

Assuming your camera has a bracketing function, the in-camera process is quite simple.

Place the camera on a tripod (it is important that the framing remains identical throughout the shots), and then look for your bracketing setting in the camera's menu options.

Once you activate the bracketing function, you will usually need to fire off several consecutive shots to complete the bracket. How many shots there will be in the bracket is determined by how you set the bracket up. Most cameras allow for three or more frames to be included in the bracket.

When you bring these images into your photo editor, you will see that they range from underexposed to overexposed, with each frame being slightly different. Certain cameras even offer up to nine image-deep bracketing!

Today, creating an HDR image on your computer is almost effortless.

Many photo editing programs, like Lightroom, feature a built-in 'Merge to HDR.' Simply select all of your image files (from the bracket) and then click the 'Merge to HDR' button. The program will align and merge the images into a single, high dynamic-range frame.

If your editing software doesn't have an HDR option, you can find many free HDR programs online that will do the job just as well.

The most important thing to remember about HDR is not to overdo it. It's quite easy to create unnatural, cartoonish-looking images, including off-colored, oversaturated-looking skies. However, if you use a light hand, this technique will allow you to create stunning images.

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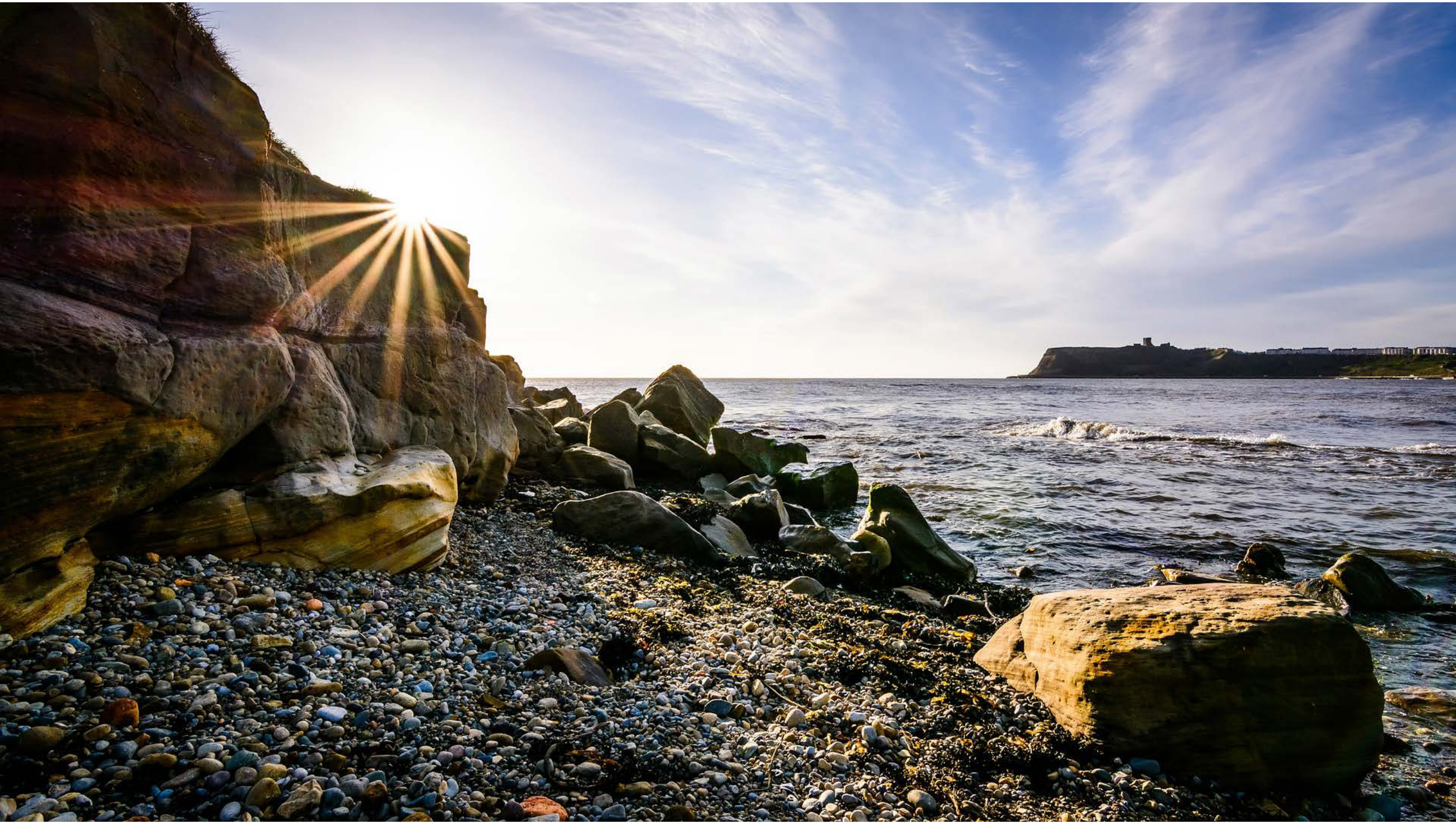

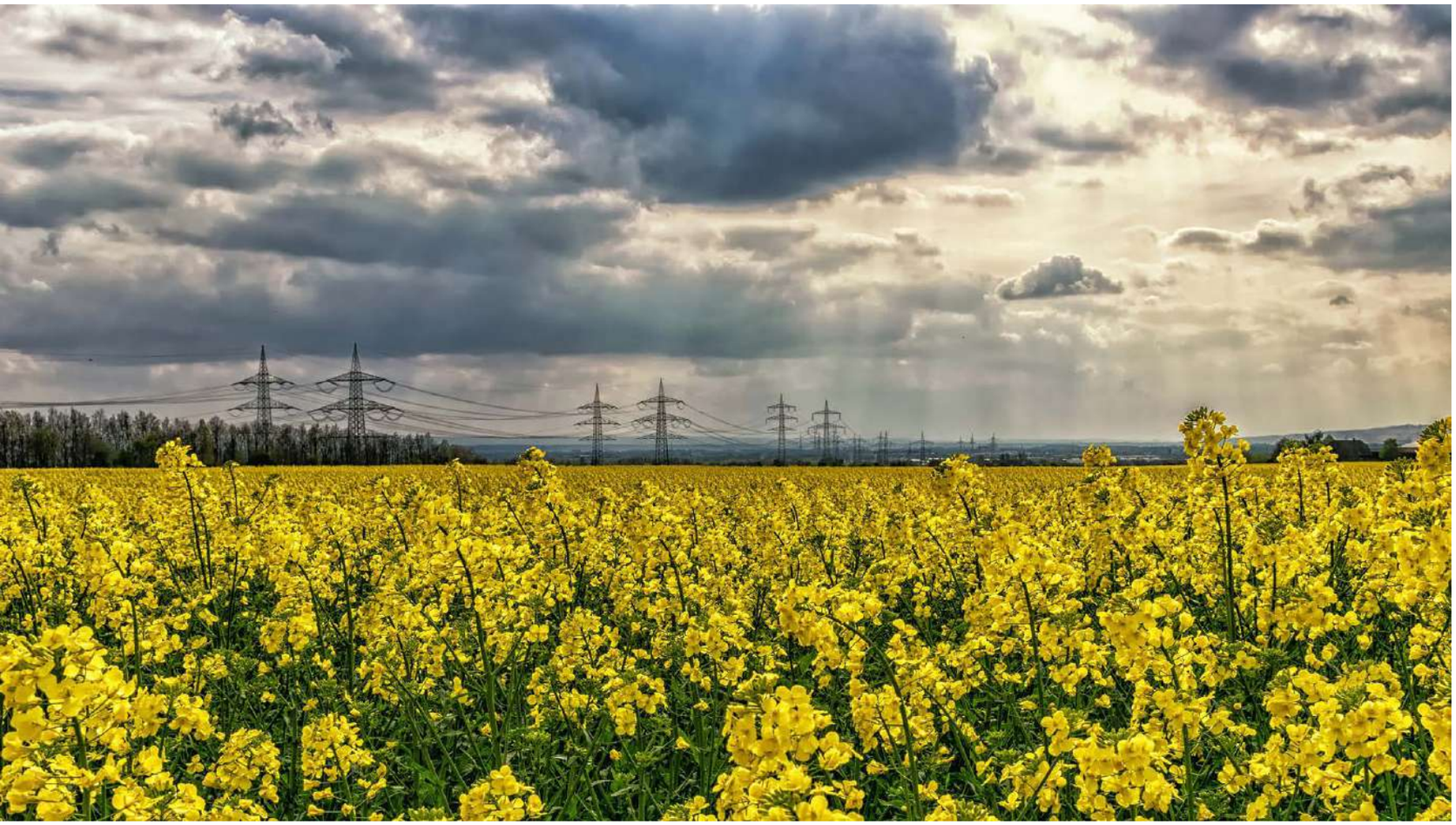

CONCLUSION

Camera manufacturers continue to push the boundaries of technology, creating cameras with an ever-widening dynamic range. However, even with these advancements, you will still often need to use one, or more, of the described techniques to properly capture the full range of tone within a scene.

Understanding dynamic range is critical to all fields of photography, be it portraiture or landscapes.

Take the time to learn your camera's limitations, and just as importantly, what you can do in post-processing. You will soon be capturing lovely skies full of detail and drama.

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Self Check Quiz

1. What is dynamic range?
2. What does a graduated neutral density filter do?
3. What does HDR stand for?
4. Which type of image file is larger and harder to use, but provides superior quality?
5. What function on your camera is critical to shooting High Dynamic Range images?
6. What is a good reason to use a graduated neutral density filter?
7. Do digital cameras recover shadows or highlights better?
8. What famous landscape photographer heavily edited his film photos in the darkroom?

Shooting Exercise:

For this field assignment, I want you to put into practice one of the techniques that I described in the article. Which one you choose is up to you.

1. The first step is to find an ideal candidate for your shot. This should be easy enough, as bright skies are all too common, even in rainy or snowy climates. Remember that you can shoot in any genre you want – though architecture and landscape photography often benefit the most from these techniques.
2. Choose one of the techniques that I described in the article, and then try to execute it. If you choose to do HDR, or simple post-processing, you may find yourself engaged in a little more computer work. However, if you choose to use a graduated neutral density filter (GND), you may need to purchase one. There are pros and cons to each method.

Have fun!

ABOUT THE AUTHOR

David Veldman wants to be a better photographer, and he hopes you will join him on the journey of learning. Best of all, he's doing it on a budget! When not taking pictures, David and his wife are hiking, snowshoeing, or discovering new culinary delights.

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