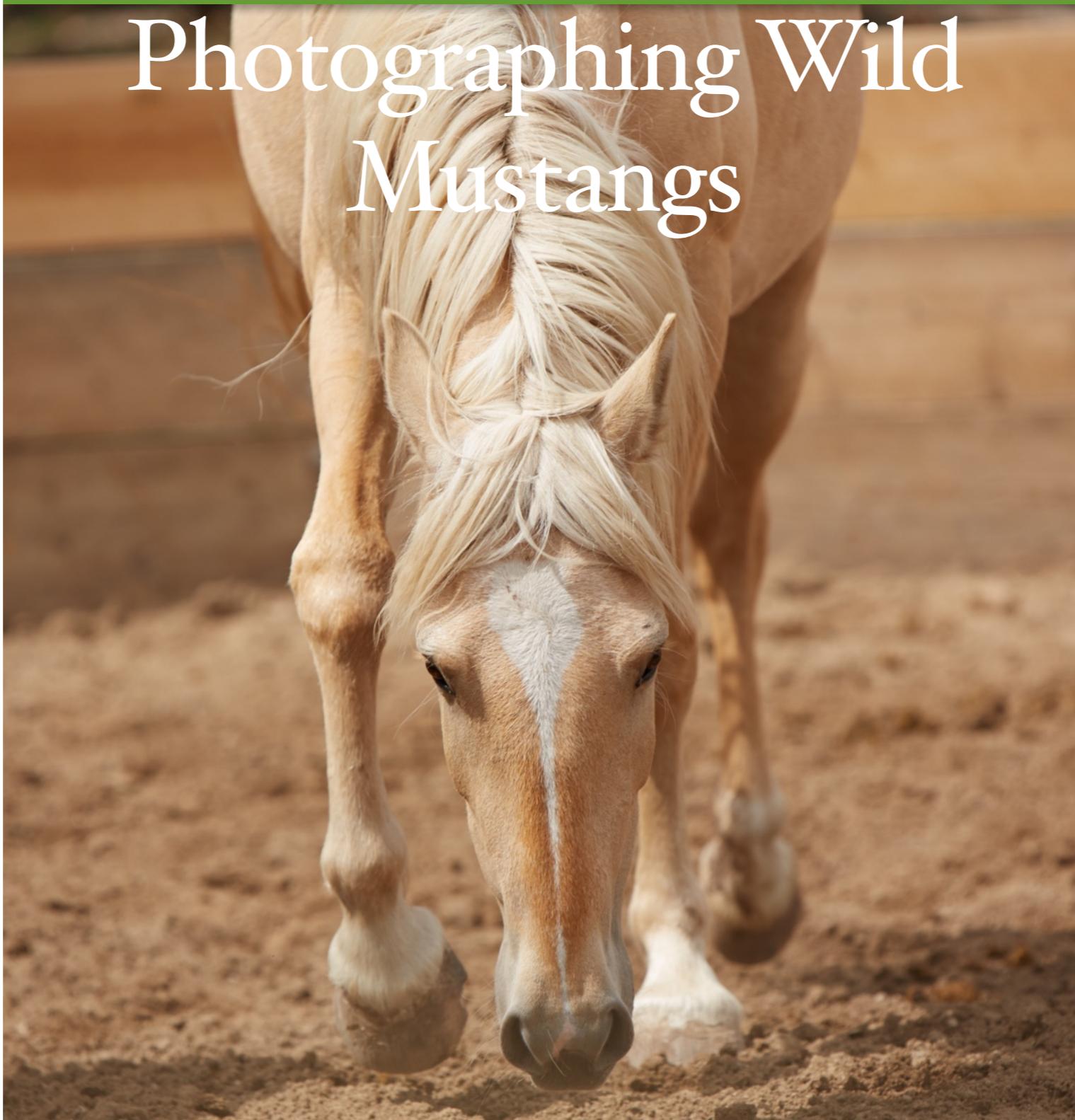


A Photographic Experience:

Photographing Wild Mustangs



A photographic experience

In this book you will find example images from a workshop I teach in Denver, Colorado, as well as the details regarding how I achieved each photograph, and a description of the thought process I used for several of them.

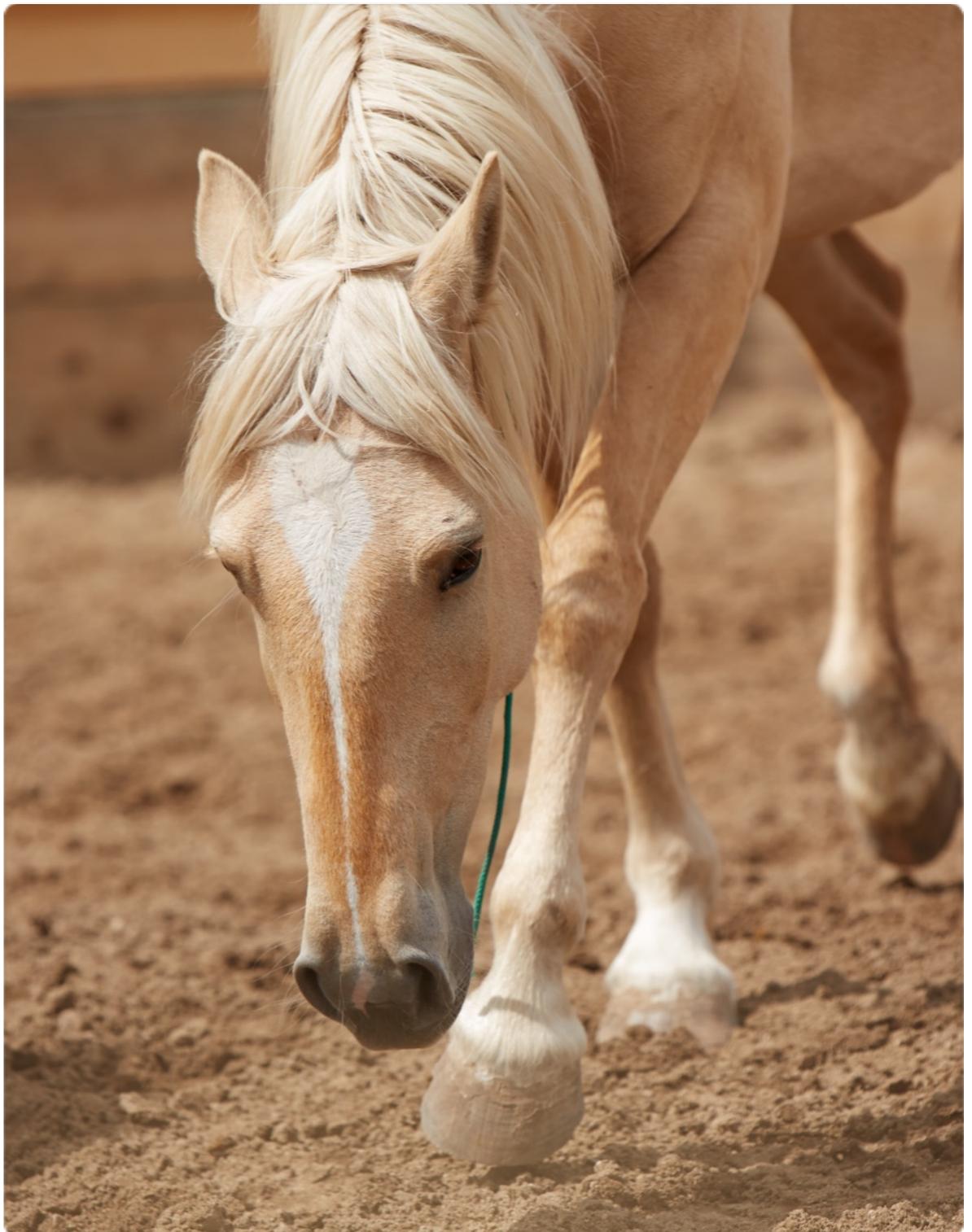


While I wrote and intended this book for my students, especially those who attend my workshop with wild mustangs, I believe this book could improve everyone's photography. It is not uncommon for someone to admire a photograph and ask, "How did you shoot that?" As a photographic instructor, I certainly hear this question a lot.

Moreover, when I lead a workshop I want my students to be able to reproduce the images they see in my presentations and lectures. What follows will be a short selection of images I have taken at my wild mustang workshop. Accompanying these images are descriptions of how they were shot and the thought process I used to make creative decisions.

Unlike many photographic guides, I will not shy away from decisions that I felt were mistakes. When we encounter decisions I wish I had made differently I will discuss what went wrong and how I went about mitigating these mistakes in my post-processing workflow.

I hope you enjoy this short guide and that it helps you make better and more creative decisions in your own shooting. If you found this guide helpful, please check out my other books on the [iBooks store](#).



Section 1

A basic portrait



How to

Canon 5Diii

Tamron 70-200 f/2.8 G2

200mm

ISO 200

1/1600

f/3.2

Manual exposure

Center weighted metering

Daylight white balance

Single focus point positioned over the eye

Single burst mode

Shot in RAW

Let's start by talking about aperture, focal length, and depth of field. In this image we have a classic portrait technique. If we want to control depth of field we have three factors to work with and these are aperture, proximity, and focal length. To decrease depth of field we open the aperture, get closer, or use a more telephoto lens.

In this photo, I wanted to produce a very shallow depth of field, so I shot at a nearly wide open aperture. Beyond that, however, I stood relatively close and set my lens to 200mm. These controls added together to produce a very shallow depth of field.

When you shoot this way you need to crop in on your subject. In other words, if I had wanted to fit the whole horse into the frame I would likely have had to shoot at a wider angle. This, naturally, would increase my depth of field.

How could I fit the whole horse into the shot and still produce this background? To begin with, we need to stand very far away and shoot with a correspondingly long lens. I could, at this point, get the horse framed the way I want, but I'll be standing pretty far away and shooting very telephoto. Moreover, working at a greater proximity increases depth of field. How can I compensate for that? By having the background in the shot relatively further away still.

And there's no way to control how far away your background is, making the shot we're imaging nearly impossible. The same is true when photographing people. If you want really shallow depth of field, limit the shot to a half body or just head and shoulders.

Shooting with a 70-200mm lens is quite popular for portraiture for the very reasons we are discussing.

Let's talk focusing. If we have a shallow DoF, then we need to be very specific regarding where we focus. You always want the eye in focus when producing a portrait. For this reason, and since the horse wasn't moving much at the point, working with single auto-focus and single focusing crosshair made the most sense.

In other words, once I grabbed focus I didn't want it changing on me again. Therefore, continuous focus was out of the question. I used a single crosshair and placed it over the eye. When I focused, the eye popped into the focus, the background went out, and the image worked as I wanted. Continuous focus could have shifted the focusing distance. As result I tend to shoot all my portraits in AF-S or, sometimes, in manual focus.

Lastly, I did leave this image in a single burst mode. I don't tend to do that, as you will see in this book. However, I wanted a very specific image this time and I only pressed my shutter release button when the moment seemed right. As a result, I didn't feel a need to shoot multiple images each time I pressed the shutter release button.

Section 2

A modified portrait



How to

Canon 5Diii

Tamron 70-200 f/2.8 G2

144mm

ISO 100

1/250

f/8

Manual exposure

Center weighted metering

Auto white balance

Single focus point positioned over the eye

Single burst mode

Shot in RAW

Why would we change this simple portrait formula? Perhaps if we want a shallow - but not too shallow - depth of field. In this image I wanted to have the front donkey in focus, but not totally lose the subsequent animals. This means modifying my approach to have not quite as shallow a DoF. As we remember, this means adjusting proximity, focal length, and aperture. Let's see how I did.

First, I shot at f/8. I knew I wanted to fill the frame with the donkeys' faces, so changing focal length and proximity weren't much of an option. Instead, notice that I stopped down the aperture. This means taking the picture at a 1/250 instead of a significantly faster shutter speed. That's okay, the subjects are not moving much at all. This allowed me to hit f/8.

I did shoot more wide angle than the previous example, and that increased DoF as well. But mostly I achieved the effect I wanted by stopping down.

Again, I shot with a single focusing crosshair and in AF-S mode, making sure I shot few pictures and focused them correctly along the way. The reasoning here is the same as it was in the previous portrait example. With that said, I'd like to examine the mistake I made, and that was shooting in auto white balance mode.

Your white balance mode informs the camera how, or if, to adjust the color it records, as it creates the image. In other examples throughout this book, I shot with a dedicated white balance, usually daylight balanced. But here I accidentally left my camera in auto white balance.

What was the result?

Well, the other images in this book exhibit a much richer color tone. I know the donkeys have brown fur without rich color vibrancy, but shooting in a direct daylight mode would have made this image pop even more.

Naturally, I took every image in this book in RAW, which allows for full color correction in post. I took the image and warmed up the color temperature to match a daylight white balance and came up with the edited version below. Also, I pulled information out of the shadows. These kinds of edits are very easy when an image exists as a RAW file.



Section 3

An action image



How to

Canon 5Diii

Tamron 70-200 f/2.8 G2

177mm

ISO 400

1/2000

f/2.8

Manual exposure

Center weighted metering

Daylight white balance

Continuous focus mode with center focus point

Continuous burst mode

Shot in RAW

What changes as we shoot action, particularly action coming towards the camera? First, we need to start thinking about focusing much more deliberately. Secondly, we need to give a lot of thought to shutter speed.

Naturally, I knew I needed a fast shutter speed and so I chose a 1/2000. Making this decision forced my aperture wide open and yet the image was still too dark. Therefore, the ISO had to increase until I had the brightness of the image that I wanted.

As I said before, as you open your aperture you need to care more about your focusing system because you cannot rely on DoF nearly as much. This is especially true for a moving subject (more so when it's moving towards you.) So how do you focus for this kind of an environment?

First, you change the camera to a continuous autofocus system, rather than AF-S. Now the camera constantly achieves a new focus so long as you press your focusing button in. While the camera comes out of the box using the shutter release button to focus, many action photographers change it to a button on the back of the camera. This is called, I'm sure you're shocked, back-button focus.

After changing the camera to a continuous focusing system you need to make sure you're focusing to the correct distance. This image was staged, in other words, I knew she would be riding towards me and jumping this log. By the way, having this kind of knowledge and preparation is one of the main reasons to take a photographic workshop

Having this knowledge allowed me to frame the shot first. I wanted the two trees on the side to act as the edges of my photograph. Knowing this allowed me to predict where within the frame the horse would be when it jumped the log. I placed my focusing crosshair approximately where I thought the horse's head would be at that moment and began shooting.

To make the most of an action sequence, you'll want your drive mode set to burst, rather than the single image we have been shooting. Many of these images will be out of focus, as your camera constantly focuses, shoots, finds the subject has moved, and refocuses. Shooting images throughout an action, and finding the in focus ones later has a name in action photography: Spray and Pray, and it is a time honored tradition for those of us who photograph action sequences.

Other choices in this image are not surprising. The images are still in RAW, the white balance was daylight, and I was shooting in manual exposure, which I always do.

In order to make these kinds of decisions when shooting and get consistent results, we need to shoot in manual exposure. Any other shooting mode will alter the image as you shoot, in response to the metering mode and its constant re-evaluation of light. Metering modes can be easily fooled, and so will provide inconsistencies as you shoot or change the exposure triangle in ways you may not like.

Section 4

Tracking an action image



How to

Sony A6000

Sony 70-200 f/4

139mm

ISO 100

1/1000

f/4

Manual exposure

Center weighted metering

Daylight white balance

Continuous focus mode with subject tracking

Continuous burst mode

Shot in RAW

Taking the concepts we have already learned about action, what changes for us as we track a moving subject throughout the frame? First, the things that do not change are the exposure triangle. Here we have ISO 100, 1/1000, and f/4. Proper technique is proper technique, independent of other factors and so this exposure triangle is remarkably similar to the previous one. Additionally, the burst mode was still high, I was still shooting in RAW, and the white balance was still daylight. The only thing different was the focusing system. Here I needed to track a subject.

In the previous action shot I framed the image and placed my focusing crosshair accordingly. This time, that was not possible. I still needed AF-C to insure the camera continually evaluated distance and adjusted focus. It was the focus area system that needed adjustment, this is the name for the submenu in the camera that decides where within the frame to attempt to find a subject and acquire focus.

The particular camera I was using had subject tracking and so that was my path towards success. Some cameras require the photographer to identify the subject and only afterwards are they able to track the subject through the frame. Some cameras, including mine, will begin tracking whatever subject it identifies as it begins focusing and shooting pictures. This system will prioritize subjects near the center of the frame. Moreover, closer subjects will receive greater priority than ones further away.

When subject tracking engages, use it the same as when shooting any other action in an AF-C mode. You want to begin firing

before the action begins and continue throughout the action until you are certain it's finished. In other words, Spray and Pray.

What if you do not have subject tracking in your particular camera? Then you use the focusing crosshair system to your advantage. Suppose your camera is in AF-C mode with a single crosshair turned on. So long as you continue to press your autofocus button the camera continues to use that crosshair to estimate distance and drive the focus of the lens to that distance. So all you need to do, theoretically, is keep your crosshair on the subject you care about and that subject will be in focus more often than not.

What you give up using this technique is the ability to frame your photograph the way you want. Instead you chose a crosshair, usually the center one, and following the moving subject in order to ensure it remains in the center of the screen. Keep focusing and firing and you will arrive at some degree of success.

A good drive mode and a fast focusing system will dramatically increase your odds of success. So will a fast memory card. After all, if you put a slow speed memory card into your camera, and shoot images at a high burst rate, eventually the slow memory card will stop the camera. It needs the camera to buffer in the images already shot before creating new ones. This kind of handicap can dramatically affect an action photographer's rate of success.

Section 5

An interaction



How to

Sony a6000

Sony 70-200 f/4

135mm

ISO 100

1/1000

f/4

Manual exposure

Multi segmented metering

Daylight white balance

Single auto focus with face detection

Continuous burst mode

Shot in RAW

Switching topics, what happens when we want to observe interactions? These moments are about emotion and not speed. What kind of exposure triangle and focusing system makes sense here?

I was further away and I wanted to limit my frame to the interaction at hand, therefore I shot relatively telephoto. As a result, I knew there would be a shallow depth of field. I was comfortable with this effect and thought it would add to the aesthetic of the frame. As you can see, I shot at 1/1000. The reason had nothing to do with action, but rather to force my aperture as open as it would go. I would have been comfortable with a 1/250 shutter, but that would have made my aperture f/8 rather than f/4.

For focusing, I could have used a focusing crosshair and that would have worked very well. But if your camera has face detection, then turning it on when shooting people and interactions makes a lot of sense. My camera had face detection and this prioritizes focusing to human faces. I turned this on and let the focusing system figure itself out. All I needed to do with wait for the moment and shoot. I still left the burst mode turned to continuous because when great moments happen I want to shoot a variety of images I can chose from later on.

But again, I made a white balance mistake. Elsewhere in the round pin, a white balance of daylight would have worked (and did). But my subject turned away from the sun and wore a wide brimmed hat. This turned the color temperature on her face into shade,

rather than daylight. If we examine the original image we will see the color temperature is too cool as a result. Thankfully, I shot this image in RAW, allowing for some white balance and shadows corrections.

The image below changed these two attributes, and created a much more accurate and pleasing image. I cannot emphasize enough how useful shooting in RAW can be, since it is a forgiving format with complete information stored for later use.



Section 6

A moving interaction



How to

Canon 5Diii

Tamron 35mm

35mm

ISO 100

1/2000

f/3.5

Manual exposure

Center weighted metering

Daylight white balance

Continuous focus mode with focus point moved to the left within the frame

Continuous burst mode

Shot in RAW

If we want to create a shot emphasizing the interaction between two parties, but they are in motion, we need to slightly modify our interaction template. Whereas before I shot with a telephoto lens in order to limit the scope of the image and shrink the depth of field, here I wanted the opposite. To understand the interaction between these parties, I felt the image required a wide angle lens.

So for the first time in this book, here is an image shot with a prime lens. The 35mm focal length gives a nice amount of background and environment and helps communicate the story effectively. It also stretches depth of field, allowing me to shoot at a more opened aperture. More on that decision in a moment.

I used a fast shutter speed because there was still a significant amount of action happening, and this also required me to use a burst drive mode. To focus in the image accurately, I used a single focusing crosshair and placed it on the left side of the frame because I knew which horse I wanted to be my subject.

But let's talk about my aperture decision. The cowgirl in the back of the frame is slightly out of focus because my depth of field doesn't reach that far. I would have liked for her to be more in focus. This would have taken a greater aperture. I did not select one because I didn't want to slow my shutter (a good decision) and I didn't want to increase my ISO (a bad decision).

My ISO 400 images in this book look fine, but for some reason, I decided to not increase my ISO even though I knew it would assist my depth of field in a way I desired. Image degradation would not kick in on this camera for a while past ISO 400.

That said, the white balance here is far more accurate than the last image because my subjects are in the color temperature that I'm telling the camera they are in (specifically, daylight). I also achieved a good exposure and have many usable images from this sequence because of the burst mode. So there's a lot of good here.

How do you arrive at a proper manual exposure? You begin by deciding what aspect of the triangle is most important. Naturally, you determine this by deciding what creative aspect of the photo you care most about. Should this be the action of the shot, then your primary corner of the exposure triangle will be shutter speed. Should it be the depth of field, then it will be the aperture.

You first select an aperture or shutter value to match your creative decision. Whichever you did not prioritize, aperture or shutter, then moves to accommodate your first choice and make the image bright enough. ISO acts as a pressure valve when you are asking more of your aperture or shutter than they can really give.

In a situation where both DoF and action are important, as with this image, you will find yourself raising your ISO to levels you may not have predicted. But to obtain the results you really want, you will need to make this compromise. That was my failure with this image. While it has only slightly shallower DoF than I would have wanted, a few changes could have made the difference between close and exact. As I said before, shooting manually allows you to make these decisions easily and on the fly.

Section 7

An example



How to

Canon 5Diii

Tamron 85mm f/1.8

85mm

ISO 100

1/640

f/2

Manual exposure

Center weighted metering

Daylight white balance

Single focus point positioned over the eye

Continuous burst mode

Shot in RAW

Section 8

An example



How to

Canon 5Diii

Tamron 70-200 f/2.8 G2

200mm

ISO 200

1/1000

f/4

Manual exposure

Center weighted metering

Shade white balance

Single auto focus mode using
an individual crosshair

Continuous burst mode

Shot in RAW

Section 9

An example



How to

Canon 5Diii

Tamron 70-200 f/2.8 G2

70mm

ISO 100

1/1000

f/4

Manual exposure

Center weighted metering

Daylight white balance

Single auto focus, using an evaluative focusing area

Continuous burst mode

Shot in RAW

Section 10

An example



How to

Sony A6000

Sony 70-200 f/4

135mm

ISO 100

1/1000

f/4

Manual exposure

Evaluative metering

Daylight white balance

Continuous focus mode using subject tracking

Continuous burst mode

Shot in RAW

Section 11

An example



How to

Canon 5Diii

Tamron 70-200 f/2.8 G2

118mm

ISO 100

1/1000

f/4

Manual exposure

Center weighted metering

Daylight white balance

Continuous focus mode with single center focus point

Continuous burst mode

Shot in RAW

Section 12

An example



How to

Canon 5Diii

Tamron 70-200 f/2.8 G2

200mm

ISO 100

1/2500

f/2.8

Manual exposure

Center weighted metering

Daylight white balance

Single auto focus mode using
an individual crosshair

Continuous burst mode

Shot in RAW

Section 13

An example



How to

Sony A7Rii

Zeiss Batis 85mm 1.8

85mm

ISO 125

1/2000

f/5.6

Manual exposure

Evaluative metering

Auto white balance

Single auto focus, using an evaluative focusing area

Single burst mode

Shot in RAW