

Sunset Photography

Presented by The F Stops Here

1. Exposing sunset properly

a. Creatively, you want your sunset image to still be a landscape image, which means that we need to think in terms of the creative controls essential for landscapes.

- i. First, a reasonable aperture range will be key. This should be in between $f/8$ and $f/11$. Don't stop down beyond this with most lenses due to diffraction.
- ii. Diffraction is when the wavelengths of light interfere with each other. This degrades the detail of a lens. Diffraction occurs at different points with different lenses, but I have never seen it manifest earlier than $f/11$. Incidentally, this is why many high end lenses don't stop down past $f/16$.
- iii. After the aperture has been secured we care immensely about the ISO value. You want this to be your native ISO for image quality reasons. As we will be prioritizing ISO over shutter speed, you will need a tripod for your sunset shoot.
- iv. After selecting the ISO value (ideally your native ISO). You will simply adjust your shutter speed until the image is bright enough.
- v. How do you know that an image is exposed properly? You use the histogram.

- b. The histogram measures the distribution of values throughout your image.
 - i. Ideally you want your subject well exposed, but this comes after other concerns.
 - ii. There is more information in the underexposed pixels than the overexposed ones. This implies a very specific way of shooting.
 - 1. If we are clipping highlight areas, move the highlights leftwards within the frame until the highlights come off the right wall or we begin clipping the left side of the histogram. This gathers as much information as we can achieve in an image.
 - 2. We don't make an image dark beyond the need to protect highlights, however. When you brighten the dark areas of an image you introduce noise.
 - iii. When you know the histogram is representative of reality and holds as much information as possible, then you can concern yourself with a well exposed image.
2. Do you need HDR?
- a. HDR imagery has been around a long time and allows you to merge images together to expand the area that is properly exposed.
 - b. Many great softwares can do it, including Lightroom and Capture One.
 - c. However, being able to bring out information from the shadow portion of an image is nearly as powerful. The trade-off is really

that with a single image you will introduce more noise into the darker areas. With an HDR you will blur the edges of subjects that move within the frame.

3. Focus is either a matter of hyperfocal calculation or having a specific subject you want in focus.
 - a. If you have a specific subject you want, then use an individual focusing point and place it on the subject. I like to shoot these images with back button AF so that after pulling focus (and as the sun sets throughout the shot) my focus will not change.
 - b. A hyperfocal calculator takes in the sensor size, focal length, and aperture you have selected and tells you the exact distance to focus for maximum depth of field.
 - c. Please note that if I can't focus to the specific distance indicated by the calculator, then I round further away rather than closer.
4. Now that I have the image recorded, how do I edit it for best impact?
 - a. At a basic level I want to take the exposure brighter and brighten the shadows.
 - i. We tried to balance protecting highlights with the goal of keeping the image as bright as possible. Here we will bring up the midtones and shadows, using our dynamic range tools.
 - ii. Let's talk about adding contrast. Adding it through the contrast slider is a blunt instrument. You can do nuanced and asymmetrical adjustments through the tone curve tool.

1. First, please note that there is a toggle on and off for each of the remaining panels to see their adjustment individually.
 2. Don't be intimidated by this adjustment. It just refers to contrast and you don't have to use it if you don't want to.
 3. Separate highlights and shadows. Click on the line to lock one point in place.
 4. Also can adjust RGB in a curve setting (at top of curve panel).
 - a. Do each color separately.
 - b. Now adjust contrast at a color specific level.
 - c. This gives control over skin tone and other color specific highlights or shadows in the image.
- b. Next, we use noise reduction to mitigate the added noise from our expanded dynamic range editing.
- i. Should be done before the detail slider. Lightroom does a small noise reduction to RAW images upon import.
 - ii. Two types of noise. Color noise is when multiple colors appear in an area that should be a singular color where luminance noise appears more like grain. Adjust each slider to see which you have.
 - iii. Moving detail slider gives more detail but can introduce noise. Moving it to the left can give you smoother results with less detail.

- iv. Moving the contrast slider adds contrast, but can introduce noise and artifacts.
- c. If we lose detail from noise reduction, we use the sharpening tools to bring it back. The sharpening slider is a contrast adjustment at the edge of subjects.
- i. Use after noise reduction, not in order of sliders.
 - ii. Zoom in on the navigator to see the effect of your work.
 - iii. Radius slider affects how far away from each pixel sharpening occurs. Very fine detail needs a small radius (such as a macro or a portrait) and images that have larger and cleaner edges want a larger radius (like landscapes or architecture).
 - iv. Detail slider changes the amount of sharpening done.
 - v. Masking slider controls where the sharpening takes place.
- d. Let's talk about editing color. We want bright, vivid colors. This means making sure we have deep black and shadows within the frame, which creates shadow information.
- i. Use the blacks slider to bring in a rich, black tone.
 - ii. Use the dehaze tool to add atmosphere to the scene, which will also add contrast and darker tones.
 - iii. Use saturation to push color depth, but doing so globally requires a light touch. You will do better with selective color editing, using the HSL tools.
 - 1. HSL is hue saturation and luminance (brightness), which you can edit for particular colors. This is a more nuanced way of doing color and saturation work.

2. Hue is the actual color.
 3. Saturation is all colors and how deep those colors are.
 4. Vibrance protects skin tones and highly saturated areas.
 5. Luminance is the brightness of those colors.
- e. If you have a shadow area that should be cooler than direct sunlight, use the color grading tools, which are also known as split toning.
- i. Ability to adjust the color of highlights and shadows separately.
 - ii. This includes hue saturation and luminance for each value. How you adjust exposure, specifically the white and black points before, will help define “highlight”, “midtone”, and “shadow”.
 - iii. Adjust blending to make sure it looks realistic.
 - iv. Remember that shadows are cooler than areas of direct sunlight. That’s why these adjustments exist.
- f. Lastly, we can use the calibration tool to look at how color manifests in the image.
- i. Informs the colors in your image, so should be used earlier, not later.
 - ii. First, please note that colors are not typically “pure” the reds have greens and blues in them. So adjusting the hue and saturation of the primary colors will affect every pixel within the image. This is different than when you adjust a color in the HSL panel.

- iii. Changing saturation, especially of blue, can enhance all the color within the image.
 - iv. This is different from adjusting the hue, which can throw off your color accuracy.
 - v. Red primary is great for working with skin tones and also sunrises/sunsets.
5. Combine all this with layering and masking.
- a. Click on “m” or click on the mask button below the histogram.
 - b. Add new mask
 - i. Select subject
 1. This new feature uses machine learning to select your subject.
 2. Click on the mask to add or subtract.
 3. You can combine this with other masks for combined effects.
 4. After creating the initial mask you can invert it. If you adjust it and want to edit the remainder of the image then duplicate the mask, invert it, and edit it (this will be described below as well.)
 - ii. Select sky
 1. Use with the same tools described in the “select subject section”.
 2. Creating two masks, one for the sky and one for everything else, can increase the speed of your workflow.
 3. You can combine this with “select subject” and have as many masks as you want.

iii. Brush

1. Tool can be docked inside the panel
2. The size options refers to the size of the tool.
Feather is the hardness of the edge. Flow is the rate of application.
3. Hold shift to constrain the brush to a vertical line.
4. Right and left bracket adjust size.
5. Click on swatch to change color of overlay.
6. Click “o” to toggle overlay on and off.
7. After brushing an area you can click on erase on the mask panel and remove some of the painted mask.
Please note this does not appear in the “select subject” or the “select sky” mask tool.
8. Name a mask to find and adjust it easily later.

iv. Linear gradient

1. Click and drag to create the gradient.
2. Middle pin adjusts where the control tool is and where the gradient falls.
3. Bottom button rotates.
4. Pins at top and bottom increase or decrease the length of the gradient.
5. If you want to adjust the rest of the image separately you can duplicate the mask and invert it.
6. To do this click on the mask, then on the gradient, then on the more icon (three dots).
7. There you will find “invert”. You cannot invert the gradient inside the mask panel like before.

8. One nice trick is to create a sideways gradient which mimics the direction of sunlight. In this way you can add contrast to a flat image.
- v. Radial gradient
 1. Drag the tool to create the size of the radial mask.
 2. Drag outer pin to change the size.
 3. Click on outer line to rotate the shape.
 4. Click the inner pin to adjust how hard the edge is.
6. Out shoot will be at Castlewood Canyon State Park on Saturday, September 24, from 6:30 - 8:30 PM MT. We will be at the Homestead Trail.
 - a. <https://tinyurl.com/59ev92ky>
 - b. Look for the Homestead trail, which you get to by taking Parker Road and turning right at CO-86 W.
 - c. Turn left after a half a mile onto Castlewood Canyon Road.
 - d. You will see the Homestead Trail on your left. Your admission into the park is part of the class. Weather is expected to be partly cloudy between 70 and 60 degrees.