Stockton Camera Club

The Shutter Tripper December 2018

November Print Images of the Month

Yellowstone Falls

Class A Print of the Month - Sheldom McCormick

Magnolia Unfolding

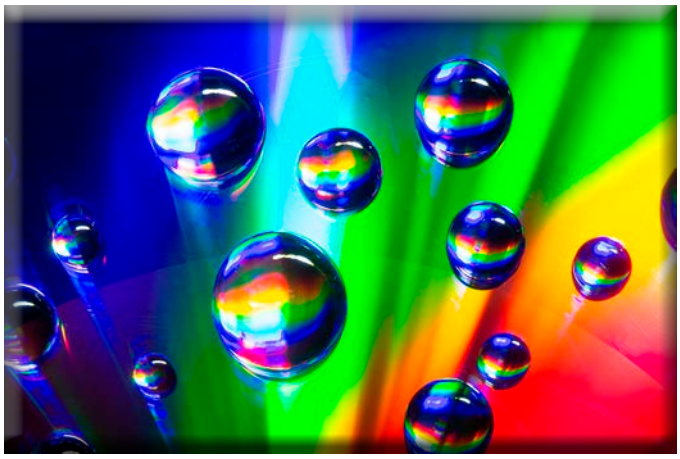
Class AA Print of the Month - Em Mclaren

Fall Colors in Nevada City

Class AAA Print of the Month - Joanne Sogsti

November 10's of the Month

Dahlia
Christine Blue



The Speed of Color
Wayne Carlson

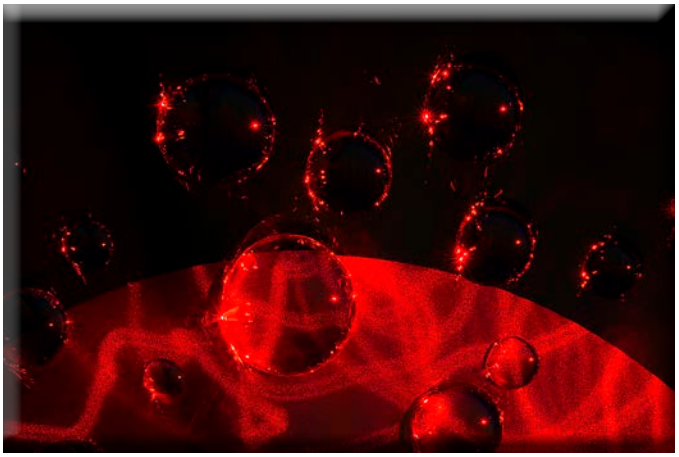
Autumn Abstracts
Dean Taylor

Annas Hummingbird
Joanne Sogsti

Hummingbird Looking at Mantis
Heide Stover

First Flight of the Day
Christine Blue

Teton Majesty
Dean Taylor



World of Red
Wayne Carlson

Osprey Flying up with Stick
Heide Stover

Wasatch Autumn
Dean Taylor

The Cashier
Mac McCormick

Glacier in Spring
Sharon McLemore

Old Fashion Girl
Em McLaren

Round the Barrel
Heide Stover

Sardine Lake in a Cystal Ball
Joanne Sogsti

Stay Close to Mother
Christine Blue

November Meeting Notes

Heide opened the meeting. There were no guests tonight. She thanked Doug for leading the outing at Woodbridge Ecological Reserve as he is now a docent there. Those who were able to attend enjoyed it.

1. It was announced that the San Joaquin River National Wildlife Refuge, near Beckwith Rd. will be flooded on Monday, for the birds, and will become a good photoshoot.

2. Doug got first and third place for his photos at the Sandhill Crane Festival. Congratulations!

3. Heide gave an update on Paul who is in the hospital and just had his 70th birthday. Our thoughts are with him and his family.

Dean introduced Jim Berger as this month's judge. It's prints only, this month. Jim and his wife Irene belong to the Sierra Camera Club. He was a teacher of photography and both he and his wife are excellent photographers. He says he enjoys photographing landscapes and people since his retirement.

NOVEMBER PRINT COMPETITION WINNERS

CLASS A – "Yellowstone Falls" by Sheldon McCormick

CLASS AA – "Magnolia Unfolding" by Em McLaren

CLASS AAA – "Fall Colors In Nevada City" by Joanne Sogsti

Congratulations to all the winners!

The SPECIAL SUBJECT for December is BEFORE AND AFTER.

Please let me know if there are any corrections or additions to the notes.

Thanks. Have a very Happy Thanksgiving! em

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President's Message

December 2018
By Heide Stover

Not many showed up for the November print meeting. The prints that were brought in were very nice and it was nice to hear the comments from our judge. This is the first time we have had this judge. He used to teach photography in high school and had a fun way of commenting on the pictures. He is a super nice person and I enjoyed the meeting. His wife came with him and is also very nice. Both are excellent photographers.

All the smoke should make for some colorful sunsets and sunrises. Not fun to be out in though. If you go out shooting you may want to think about wearing a mask. Heed the warnings and be safe.

Get out there and start shooting!

A Big Thank You to Our Sponsors!

2018 Competition Policy

A. GENERAL RULES

1. Only paid-up members may enter club competition.

2. Regular print and digital image competition period: Once each month except January. A competition year is February through December. Current regular meetings are February, March, May, July, September, October and December. The number of meetings may change from time to time at the discretion of the Board of Directors and approval of the general membership as facilities permit. The Annual Awards Dinner will be held in January.

3. A total of four (4) images (all prints, all digital or a combination of both) may be entered each competition month. A total of three (3) images may be entered in the Open Division and a total of one (1) in the Special Subject Division. The number of entries may change from time to time at the discretion of the Board of Directors and the approval of the general membership.

4. Each image will be scored from 6 to 10 points. All prints or digital images receiving 9 or 10 points will be classed as an honor image. The title of each print or digital image entered will be read before being evaluated. The name of the maker will be read for 9-point honor winners. Maker's names will be announced for the 10 point images after the Print & Digital Image-of-the-Month winners are chosen.

5. A print or digital image that does not receive an honor score, may be re-entered one more time in the same division.

6. A print or digital image may be entered in all divisions for which it qualifies; i.e., an honor image in Open may also be entered in the Special Subject Division at another competition. A print or digital image that receives an honor score may not be re-entered in the same division.

7. Any print or digital image that appears to be ineligible for competition or not qualified for a specific division could expect to be challenged. The Competition Vice-President shall decide whether or not the image is acceptable.

8. The exhibitor must have exposed each negative, slide or digital image entered. All images submitted for judging must be the work of the photographer/maker including the taking of the images and any digital enhancements and/or manipulation of the image. This does not apply to the processing of film or printing by a commercial processor.

9. The same image should not be entered both as a print and a projected digital image in the same competition.

10. In the event of absence or barring unforeseen circumstances, a member may submit make-up prints or digital images for one competition night per competition year; and whenever possible must submit all make-up prints or digital images at the meeting immediately following the month a member failed or was unable to submit the prints or digital images. Make-ups in the Special Subject Division must be the same subject as the month missed. Also, in case of absence a member may assign the responsibility of submitting his or her prints and/or digital images for competition to another member.

11. A club member who serves as judge cannot enter his or her own prints or digital images in the same competition. The judge's make-up prints or digital images can then be entered in another competition during that competition year. This is in addition to the once-a-year make-up provision already allowed.

12. Prints or digital images may be projected/viewed briefly before the judging of each division if the judge indicates he/she would like a preview.

B. PRINT ENTRY RULES

1. Each print entered must have a completed label attached to the back of the print including; name of maker, title, date entered and Division (Open or Special Subject). The writing or printing on the form must be legible. Labels must be attached on the back of the print in the upper left-hand corner for correct viewing of the print.

2. All prints must be matted or mounted with a total size (including mat board) of no larger than 18" X 24" and no smaller than 8" X 10". Exception: One side of a Panorama Print may be no larger than 36". Prints that are smaller than 5" X 7" will not be accepted. The maker's name must not appear on the viewing surface of the image. Framed prints shall not be entered.

3. Prints accompanied by entry forms should be submitted no later than 15 minutes prior to the start of the regular monthly meeting.

4. Prints receiving a score of 10 points, in each class, will be regrouped and judged for selection for the Print-of-the-Month honors. Print-of-the-Month honors will be given in Class A, AA & AAA.

C. DIGITAL IMAGE ENTRY RULES

1. Digital images must be submitted in a format and by the deadline specified by the Competition Vice-President. Digital images may be submitted by email, mailed (CD) or delivered (CD) to the Competition Vice-President. Definition of Digital Image: An image taken with a digital camera, a negative, slide or print scanned into the computer and processed digitally.

2. Images must be in a format compatible with the projector. The key thing to keep in mind when formatting photos for submission is that the projector we use in the competition has a (maximum) resolution of 1400 x 1050 pixels. This means that any photo that exceeds this size in either dimension, could end-up being cropped by the projector. In other words: the image width cannot be more than 1400 pixels and the image height cannot be more than 1050 pixels. If your image is horizontal, only change the width to 1400, if your image is vertical, only change the height to 1050. Do not change both. Down-sizing the image from the "native" resolution coming out of your camera also significantly reduces the file size. This helps when emailing the files and takes-up less space on our hard-drives.

3. The maker's name, title of image, date entered and division (Open or Special Subject) must be included as the title of the image. When you have finished re-sizing your image save your image with a new title. For example do a Save as: Smith Sunrise Splendor 05-15 O.jpeg. (O-Open or SS-Special Subject). Specify whether you're Beginner, Advanced or Very Advanced.

4. Digital Images receiving a score of 10 points, in each class, will be regrouped and judged for selection for the Digital Image-of-the-Month honors. Digital Image-of-the-Month honors will be given in Class A, AA & AAA.

Stockton Camera Club

November 2018 Competition Standing

Jim Berger, a member of the Sierra Camera Club, viewed 36 prints for a average score of 9.47

Print of the Month Class A – Yellowstone Falls, by Sheldon McCormick
Print of the Month Class AA – Magnolia Unfolding by Em McLaren
Print of the Month Class AAA – Fall Color in Nevada City by Joanne Sogsti

Please check out the website, http://www.stockton-cameraclub.com/home.html

Class A Standings	TOTAL	OPEN	SS	FEB	MAR	MAY	JUN	JULY	SEPT	OCT	NOV	DEC
Wayne Carlson	302	253	49	37	39	39	35	39	38	37	38	0
Sheldon McCormick	289	234	55	36	35	38	38	37	34	35	36	0
Jim Cahill	90	80	10	25	0	38	27	0	0	0	0	0
Ron Wetherell	75	75	0	27	0	19	0	29	0	0	0	0
Lanny Brown	56	36	20	0	10	18	18	10	0	0	0	0
Brenda DeRoos	32	23	9	0	0	0	0	0	0	32	0	0
Monica Hoeft	26	26	0	26	0	0	0	0	0	0	0	0
Class AA Standing	**TOTAL**	**OPEN**	**SS**	**FEB**	**MAR**	**MAY**	**JUN**	**JULY**	**SEPT**	**OCT**	**NOV**	**DEC**
Em McLaren	305	247	58	39	38	38	38	39	38	38	37	0
Heide Stover	302	247	55	39	39	37	37	37	37	37	39	0
Christine Blue	268	211	57	37	39	38	0	39	37	39	39	0
Elizabeth Parrish	252	199	53	36	34	38	37	38	35	34	0	0
Paul Chapman	214	167	47	34	37	36	34	38	35	0	0	0
Richard Bullard	111	93	18	0	37	36	38	0	0	0	0	0
Stan Sogsti	37	28	9	37	0	0	0	0	0	0	0	0
Ed Richter	0	0	0	0	0	0	0	0	0	0	0	0
Class AAA Standing	**TOTAL**	**OPEN**	**SS**	**FEB**	**MAR**	**MAY**	**JUN**	**JULY**	**SEPT**	**OCT**	**Nov**	**DEC**
Dean Taylor	307	250	57	39	39	39	39	38	38	36	39	0
Joanne Sogsti	307	249	58	39	37	39	39	40	37	37	39	0
Sharon McLemore	301	243	58	38	39	39	37	38	37	36	37	0
Doug Ridgway	193	163	30	39	39	0	0	39	39	0	37	0
Trey Steinhart	151	115	36	37	37	37	0	40	0	0	0	0
Susanne Nichols	60	30	30	0	20	20	0	0	20	0	0	0

2018 Calendar of Events		
Every 3rd Thursday (Except April, June & Aug) 6:30 PM	**West Lane Bowling Alley Stockton**	**Membership Meeting Contact Heide Stover h1stover@aol.com**
Thursday December 20	**West Lane Bowling Alley Stockton**	**December General Meeting Special Subject - Before (Unprocessed) And After (Processed) Photo**
2019 Calendar of Events		
Thursday January 17	**TBA**	**Annual Banquet**
Thursday February 21	**West Lane Bowling Alley Stockton**	**February General Meeting Special Subject - Guilty Pleasure**
Thursday March 21	**West Lane Bowling Alley Stockton**	**March General Meeting Special Subject - Focus On One Color**
April	**TBA**	**April Workshop/Photo Opportunity**
Thursday May 16	**West Lane Bowling Alley Stockton**	**May General Meeting Special Subject - Backlit**
Thursday June 20	**West Lane Bowling Alley Stockton**	**June General Meeting Prints only with no special subject**
Thursday July 18	**West Lane Bowling Alley Stockton**	**July General Meeting Special Subject - Gates/Fences**

Nature's Best :: by Don Smith

Exploring our incredible world one image at a time!

Morning Alpenglow on Mt. Whitney, Alabama Hills, Lone Pine, California. Sony a7R II, Sony FE 70-200mm F2.8 GM OSS at 150mm. Exposure: 2 sec., *f*/16, ISO 100.

How To Use Hyperfocal Focusing

Text & Photography By Don Smith

There seem to be a lot of misconceptions out there when it comes to critical focusing for scenes with lots of depth, like my image above captured in the Alabama Hills in the Eastern Sierra. I'd like to discuss hyperfocal focusing and dispel the myths I commonly hear about how to attain maximum depth of field for any given scene.

Let me first define what hyperfocal focusing is and why we would consider using it. Hyperfocal focusing allows one to utilize the maximum range of focus in any given composition, from the first element one desires to be sharp in the near portion of the scene to the furthest element (often times infinity), considering the following pre-determined factors: sensor size (full or cropped sensor), lens focal setting, aperture and distance to subject.

Simply put, a hyperfocal app like Focal from Essence Computing will calculate the closest distance at which a lens can be focused while keeping objects at infinity sharp. When the lens is focused at this distance, all objects at distances from approximately half of the resulting hyperfocal distance out to infinity will be acceptably sharp.

"Acceptably" sharp is based on what looks sharp to the human eye when holding an 8x10-inch print at arm's length. For example, if I had a composition where the closest element in my scene that I wanted to be sharp was 6 feet away, and I desired sharp focus to infinity, then the range of acceptable focus would be 3 feet (half of 6) to infinity. This begs for one more term you may not be familiar with: "circle of confusion." In optics, a circle of confusion is an optical spot caused by a cone of light rays from a lens not coming to a perfect focus when imaging a point source.

Today there are plenty of smartphone apps that allow for one to input the above factors and easily calculate where the hyperfocal distance resides. The main problem for landscape shooters, especially those who work around the fringes of the day when light is changing rapidly, is that apps won't allow for fast calculations. If you miss the light, you will miss the shot. My advice is to frame your scene while on a tripod and run your hyperfocal calculations prior to the extraordinary light arriving.

Dispelling Hyperfocal Focusing Myths

Before proceeding forward with how to calculate hyperfocal distance, let me first dispel two myths that I hear and read about on the web.

The first myth says to focus one-third into your scene. Using my image of Mt. Whitney in the Alabama Hills as a reference, if I was to have focused one-third into my scene, that would have been roughly between the foreground boulders and Mt. Whitney (I captured this scene at 150mm, so there was already limited depth-of-field to work with). Unless I wanted the foreground boulders to become out-of-focus distractions, that theory simply would not have worked.

The second myth says to focus one-third of the way up the plane of your focus. In other words, envision an imaginary tic-tac-toe (rule-of-thirds) grid over your viewfinder (your camera may allow you to already add this as an overlay) and focus on whatever elements intersect the bottom horizontal line. Here's the problem: If some foreground elements were short and did not reach that line, one might look for another element intersecting this line that lies further into the scene and causes the tiny elements that are closer to the lens to be out of focus. So, we must use some common sense if subscribing to this way of focusing for maximum depth.

Lens & Sensor Considerations

With a full-frame 35mm camera (either DSLR or mirrorless), a 50mm lens is roughly equivalent to how we humans see the world. Any focal length less than 50mm starts to trend toward wide angle, and any focal length greater than 50mm starts to trend toward telephoto. Due to the optics of the lens, wide-angle lenses allow for greater depth-of-field while telephotos allow for less. The further away you get from 50mm on either side, the more (or less) depth of field you will have, regardless of the chosen aperture.

Sensor size also plays an important role in determining depth of field for a given lens. A full frame sensor will allow for more depth-of-field for any given lens while a cropped (APS-C) sensor will not alter depth-of-field, even though the overall reach of the lens will be more. Note that APS-C sensors will not change the bokeh of a given scene, it will just crop the scene for any given focal length tighter in camera, the same as if you cropped an image on your computer; this is important to remember in terms of depth of field. Any hyperfocal app will automatically take this into account when calculating the hyperfocal distance. This is why the first step when using any hyperfocal app is to specify your camera.

Hyperfocal Focusing & Aperture

Another piece of the puzzle is the aperture you choose. With any lens, either wide or telephoto, the smaller the aperture, the more depth of field one will get with any chosen lens. Most lenses perform at their sharpest with an aperture range of *f*/8 to *f*/11. However, if I need to go to *f*/16, I don't hesitate. Furthermore, if I need even greater depth, I will use *f*/22.

There is a caveat with using these smaller apertures, and that is diffraction, which occurs when the light is bent to such an extreme using these small aperture openings that softer focus will result—especially out along the edges of the frame. In the real world, I never worry about using *f*/16 and will only go to *f*/22 if needed. Most images I shoot at *f*/22 are very sharp, and I can improve their sharpness further in post-processing.

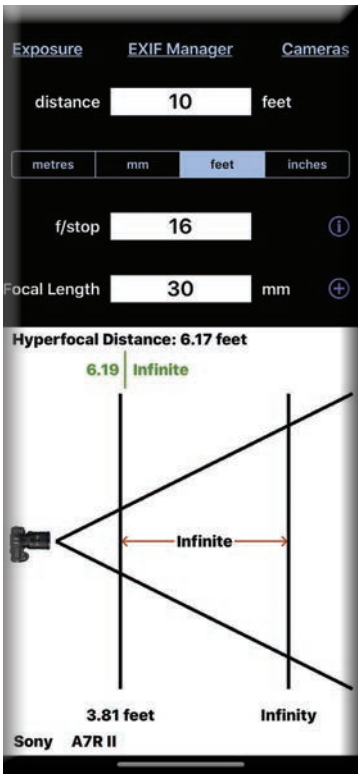
Half Dome Reflection at Sunset, Leidig Meadow, Yosemite National Park, California. Sony a7R II, Sony FE 24-70 mm F2.8 GM at 30mm. Exposure: 0.8 sec., *f*16, ISO 100.

In my spring image captured in Leidig Meadow in Yosemite Valley below, my focus point was just at the end of the foreground grasses where they meet the reflection pond. The resulting hyperfocal point, along with a small aperture of *f*/16, ensured that I was sharp from the nearest foreground grasses all the way to the distant peaks (Clouds Rest and Half Dome). I had tested my focus point prior to the alpenglow light arriving. When it did, I was confident I had the scene focused correctly, and that allowed me to shoot through the beautiful warm light bathing the peaks.

Through my 40-plus years of photography and observation, it has become clear to me that if something must be soft in the image, I'd rather it be elements that are further away from my lens—it looks more natural to the eye. If I miss the focus on the foreground but have a sharp background, the shot is usually ruined. Our visual system is attuned to gradual declines in either contrast or focus. If possible, I want to have all my elements sharp from front to back in my composition.

Using Hyperfocal Focusing Apps

What about the smartphone apps that I mentioned earlier? Using the Focal app as an example, I will walk you through how easy it is to use. There are plenty of apps available, and they all do the same thing.



The first step is to specify the camera you're using. For my image of Leidig Meadow, I was using my Sony a7R II (a full frame camera), so I entered that before I began.

The next step is to enter in the foreground subject distance. Remember, the rule of thumb is that you will get approximately one-half of the resulting hyperfocal distance sharp. The goal is to allow the app to find this number and make sure you see the exact range of focus from your nearest to furthest elements (this generally means infinity). In this scene, I focused 10 feet into the scene. The resulting hyperfocal distance was 6.19 feet, meaning the closet element in sharp focus in the scene was approximately half that number—in this case, 3.81 feet.

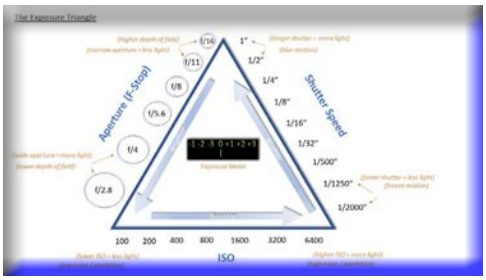
Screen shot from the Focal app by Essence Computing, used to help calculate focusing distance. In this image composed at 30mm, I needed the grasses sharp from 5 feet to infinity. As you can see, if I focused 10 feet into the scene at *f*/16, my range of acceptable focus would be 3.81 feet to infinity. Perfect.

Because I only needed 5 feet, I had some "wiggle room" if I could not get to infinity. For example, I could have focused as far as 25 feet into this scene and still had a range of 4.95 feet to infinity sharp. I would be just shy of the 5 feet I desired.
The bottom line is to always try focusing deeper into your scene if you are not getting to infinity. If you go beyond the minimum focus difference and still could not achieve infinity focus, then the next step would be to use a smaller aperture (in this case, switching from *f*/16 to *f*/22).

As mentioned earlier, as we move away from wide angle toward telephoto focal lengths, the depth of field decreases, regardless of the aperture. This is exactly what sports and wildlife shooters desire as they generally aim to have their subject sharp with out-of-focus foregrounds and backgrounds. This allows for the subject to really "pop" off the frame.

Like anything with photography, hyperfocal focusing takes practice. The cool thing is that you don't have to be on location to learn how to use it. I will experiment with different scenarios when I am relaxing or in a hotel room. The more you experiment, the more you will get comfortable when you do go out into the field. Eventually, with enough practice, you will be able to start predicting hyperfocal distances. See more of Don Smith's work at donsmithphotography.com.

Backcountry Journeys
Photography Tours, Workshops & Safaris



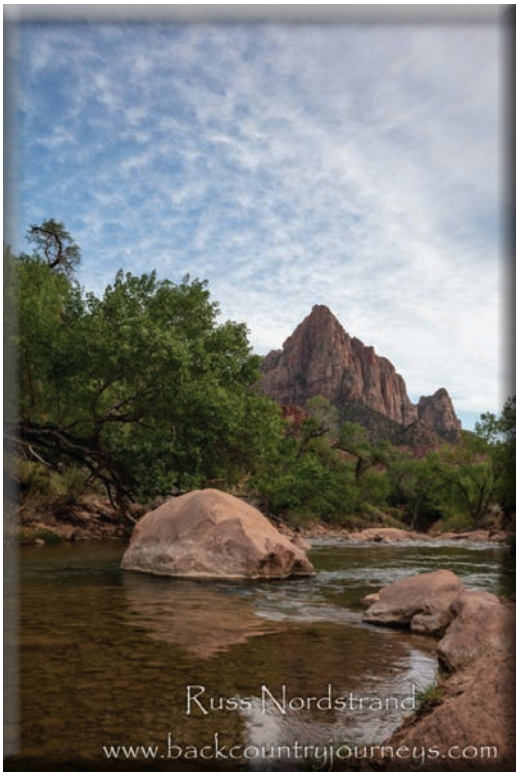
Understanding the Exposure Triangle

November 11, 2018/by Kenton Krueger

A lot goes into creating a quality image. It's more than simply having an expensive camera. There are particular skills and techniques that can help a photographer get the most out of his/her camera. We thought a discussion on the exposure triangle would be a useful exercise for this blog, as it is arguably one of the more important skills a photographer can possess. Nice composition of an aesthetically pleasing scene will almost certainly always be ruined by poor exposure.

Each image we make requires a certain quantity of light to expose it correctly. This piece is all about understanding the components to that exposure, as well as how to find the correct exposure each time. The exposure triangle is a common way of associating the three variables that determine the exposure of a photograph: aperture, shutter speed, and ISO.

A skilled photographer really must balance all three of these to achieve a desired result. It shouldn't be luck that defines success with this aspect of photography. Save luck for catching that perfect sky, right at sunrise, precisely on the day that you happen to be standing on a perch with perfect aim at Half Dome towering over the Yosemite Valley. That is luck (and probably putting in a lot of time, but that is for a different post)!



After reading this blog, we hope that you'll be able to find perfect exposure without the need for luck. Aperture, shutter speed and ISO make up each side of the exposure triangle. Let's discuss these individually, first:

Aperture

The first side of the exposure triangle is aperture. Aperture is the size of the circular hole in the lens. A wider aperture is going to be achieved by setting your camera to a lower f-number. A narrower aperture, which will allow less light to the sensor, will be achieved using a higher f-number. As landscape photographers we'll typically want less light to reach the sensor because we are often looking for larger depth of field. Depth of field is a byproduct of aperture. Narrower apertures (higher f-numbers) give a greater depth of field, allowing more of a scene to be in focus. So, imagine for a moment that you are travelling with us on our Canyons of Utah: Zion and Bryce Tour, and we are perched to capture the Watchman in Zion National Park. If your desire is to take in that landscape with your image, you'll be looking to use narrower apertures (higher f-numbers) to create a wider depth of field for that image.

If you were looking to close in and isolate a hoodoo, or a series of hoodoos, then you would choose wider apertures (lower f-numbers) to create a narrow depth of field, which can help isolate your subject, such as Russ did in the below image.

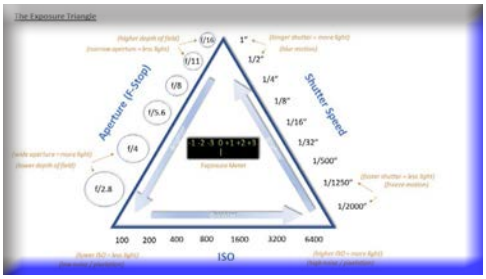
Shutter Speed

The next side of the exposure triangle is shutter speed. Shutter speed is a measure of how long the shutter remains open correlating with how long the sensor is exposed to light. A lower exposure is achieved by using a faster shutter speed because it has less time to collect light. Conversely, a slower shutter allows more time for the sensor to collect light, thereby resulting in a higher exposure. So, say you are entrenched up on Barter Island, taking photos of polar bears playing with each other as they frolic across the arctic sea ice. You may look to stop motion by using a higher shutter speed. If your shutter speed is too slow, your camera will record the movement which will result in your subjects being blurry, thus your image being deleted as opposed to framed and hung on your living room wall.

ISO

The last of the exposure triangle is ISO. Making adjustments to ISO is controlling the digital sensor's sensitivity to light. The lower the number ISO you choose, the less sensitive your camera is to light and the finer the grain. Conversely, the higher number ISO you choose, the more sensitive you camera's sensor becomes to light, which allows you to use your camera in darker situations. The cost of doing so is a grainier image.

So, why would we use a higher ISO? You'd really only want to use high ISO if you have to. If you find yourself at a point where you are already utilizing your widest possible aperture and the slowest shutter speed, yet something still needs to be done. Use a higher ISO rather than sacrificing sharpness for a slower shutter speed.



(click graphic for larger Image)

Putting it all together

Now that we know each side of the triangle, let's put it together to see how aperture, shutter speed and ISO work in concert to produce a photo that is properly exposed. And keep in mind that if one of these variables changes, at least one of the others must also change to maintain the correct exposure.

Even if you haven't previously heard of the exposure triangle, you may have heard the term 'stop.' It is crucial to know and understand what is meant by a stop of light. A stop refers to the doubling or halving of the amount of light that makes up an exposure. Adding a stop of light by doubling the exposure will brighten an underexposed image. Conversely, decreasing an exposure by one stop will darken an overexposed image.

So how do we do this?

To do this, we need to change the aperture, shutter speed, and/or ISO. So let's us look at each of these individually.
In order to add one stop of light, you'd want to double the shutter speed to do so. So, going from ⅛ to ¼ would double the exposure, increasing a stop of light. Increasing your exposure from 1/1000 to 1/125 would be three stops because it is one stop to go from 1/1000 to 1/500. Then a stop to go from 1/500 to 1/250. Then another from 1/250 to 1/125. Get it? This one is rather easy, actually, compared to what is coming up next.

F-stops, which relate to aperture, are when math stuff can start to kick in, and really who wants to do math? Not I. Perhaps do what you may have done in school and simply memorize the sequence! In the following sequence, each f-stop represents a decrease of one stop: f/1.4, f/2, f/2.8, f/4, f/5.6, f/8, f/11, f/16, f/22.

So, what does that mean? If you change your shutter speed down a stop, then you'd better change your aperture up a stop. Or, one stop each between aperture and ISO. Like shutter speed, ISO makes basic mathematical sense. Doubling the ISO is one stop increase in exposure. Halving the ISO is a reduction of the exposure by one stop.

Back to the simple life, no?

We hope that you take these tips out into the field with you next time you head out in order to get a nice grasp on the components of getting perfectly exposed images going forward. If you already know the exposure triangle, we hope this may have been a nice refresher!

Kenton Krueger has spent the past several years guiding backpackers, hikers and photographers into the wild places of the American West such as Havasu Falls, Grand Canyon and Yellowstone National Parks as well as in the Grand Staircase Escalante in southern Utah. In addition to backpacking and camping, his adventures include rock climbing, exploring the slot canyons of southern Utah, mountain biking, and bagging 14ers in Colorado's San Juan Mountain Range. Kenton is a trail runner, former pilot, newspaper photographer and writer. Kenton looks forward to utilizing his years of guiding experience, combined with his passion and experience behind the lens to provide memorable and unforgettable experiences at the wild places we will visit together.

Kenton Krueger

Infographic: Essential Tips for Cold-Weather Photography

By Todd Vorenkamp

How unfortunate is it that some of the best photographic opportunities present themselves when it's miserably cold outside? It doesn't matter what kind of camera equipment you're using, proper preparation and knowledge of your gear and environment are essential to helping ensure success when you're out in the cold, making photographs.

Before we talk photography, let me say this: be smart. Cold causes hypothermia and frostbite. There is no potential photograph worth the damaging or deadly side effects of prolonged exposure to cold. Plan your outing, do not push yourself, and have a plan for getting warm at the end of your expedition. Also, let someone know where you're going and when you expect to be back.

Before You Go Outside

1) Batteries hate the cold as much as reptiles and other cold-blooded creatures. The cold temperatures cause them to discharge faster, and there are few things worse, let me tell you, than running out of battery power in the midst of a photographic outing. The Law of Murphy guarantees that your batteries will run out just before you attempt to capture the best shot of the day or night.

Head outdoors with a fresh battery and keep your spare batteries—not in your camera bag—but inside your layers of clothing to keep them warm. Now that I think of it, someone probably needs to invent some kind of chest holster for camera batteries.

Watson LP-E6N Lithium-Ion Battery Pack

2) A camera bag or camera backpack is always great for keeping your gear clean and protected from the elements. Winter weather and cold only serve to make these accessories more important. If you are out shooting, your camera will, of course, be exposed to the same cold air that is freezing your feet, but there is no way your camera will enjoy being subjected to driving snow, slush, sleet, or ice. Keep it protected!

3) Bring a large plastic bag along with your gear. I will tell you why later.

4) Gloves. Ahhh. We can send people to the moon and back, but it is really difficult to find gear for your hands that:

Bright Tangerine ExoSkin Leather Armour Gloves

a) keeps your hands and fingers toasty warm while
b) allows you the dexterity to manipulate your camera's controls. Several manufacturers have tried to crack the code, and there are winter gloves that feature removable fingertips that are designed to allow you to operate your camera's control dials, buttons, and the shutter release. If you have discovered magical gloves that are perfect for operating the command dial of my DLSR while keeping my fingers warm, please share the name of the product!

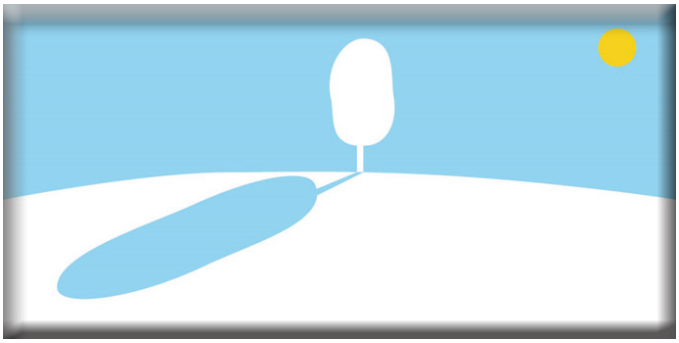
Now we are outside... seriously? It's really cold!
Don't forget to keep your spare batteries as warm as possible. Also, if you are carrying an external flash, do not forget to keep it warm, as well. The batteries in the flash will suffer in the cold. Where is my battery-holding bandolier?

Shooting tips

1) Some good news: Cold winter air is generally clearer than warm summer air, as it generally contains less moisture. Clear air = crispier photos. Sweet.

Canon EW-88C Tulip Lens Hood for EF 24-70mm f/2.8L II USM Lens

2) If there is snow on the ground on a bright day, watch your exposures. Snow can be one of the trickiest subjects to expose properly, sometimes fooling your meter into underexposure and other times into overexposure and a loss of detail. A common rule of thumb with digital is to expose for the brightest portions of the scene and make sure to keep your highlights from being blown out to "all white." Shadow detail may be extracted later in post-processing, while overexposed highlights cannot usually be recovered. Another point if photographing in the bright sun: use a lens hood. Since the snow can act as a giant reflector, there is a greater chance of stray light reaching your lens and causing unwanted lens flare.



3) More good news (for photographers): Because of the lower angles of the sun (the same lower angles that make it so bloody cold), your "quality of light" is generally better throughout the day and shadows are longer (sometimes a good element for your photos). If your shooting day presents you with cloudy, overcast weather, you might also consider changing to the "Cloudy" white balance setting to add some warmth to your photos and minimize any blue cast.

Hoya 77mm HD3 UV Filter

4) A UV filter is an ideal tool for clearing up the appearance of haze in photographs, which is more common to winter and cold temperatures, as well as when shooting at higher altitudes. However, the UV filter's other huge benefit to photographing in snowy climates is that it protects your front lens element from snow or other elements.

Before You Go Back Inside

Frozen cold? Miserable because your toes and fingers are icy cold, yet warmed from the inside by the art you just created? There are some precautions you might wish to take before going back inside to thaw out.

SanDisk 64GB Extreme PRO SDXC UHS-I Memory Card

1) Pull your memory card from your camera. Why? Read #2.

2) Put your camera and lens(es) into an airtight plastic bag. Why? Moisture and condensation will want to form on a cold object introduced into a warm environment. Moisture and electronics do not play well together; the plastic bag will magically sacrifice itself to the condensation process so that your camera and gear can stay dry while it warms up. Leave it inside for about two hours while you get yourself some hot cocoa, draw a warm bath, and transfer your new photos to the computer.

3) If it was especially cold and dry outside, you can put your camera on a windowsill to encourage a slower warming process for your camera.

Enjoy the winter with your camera. Stay warm. Protect your gear. But, most importantly, stay smart while you make photographs!

For more information, check out this B&H video and enjoy these other winter shooting tips.

What cold weather tips do you have for shooting in the cold? What has worked well for both you and your gear?