

Stockton Camera Club

The Shutter Tripper

April 2020

Corona (Beer?) Virus
We are down but not out!

(Image: © Shutterstock)

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President's Message

April 2020

By Heide Stover

Due to the Coronavirus our last meeting was canceled. This seemed like the safest thing to do. Most of us are in the at-risk group.

We had hoped to maybe make up our last meeting in April at the church. Unfortunately, we will not be able to do so. The county has a ban on group meetings for one thing, and we need to think about everyone's safety for another. I have contacted Mick to see if he would be willing to judge the digital images online. The prints can be shown as make up prints once we can get back to our meetings.

I will keep everyone updated as things go on.

No meeting in April.

Till then happy photographing and see you all?

A Big Thank You to Our Sponsors!



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2020 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 May 21	West Lane Bowling Alley Stockton	May General Meeting Special Subject - Urban/Cityscapes
Thursday June 18	West Lane Bowling Alley Stockton	June General Meeting Special Subject - Prints Only
Thursday July 19	West Lane Bowling Alley Stockton	July General Meeting Special Subject - Reflections
Aug TBA	TBA	Annual Pot Luck
Thursday September 17	West Lane Bowling Alley Stockton	September General Meeting Special Subject - Patterns
Thursday October 15	West Lane Bowling Alley Stockton	October General Meeting Special Subject - Monochrome
Thursday November 19	West Lane Bowling Alley Stockton	November General Meeting Special Subject - Prints Only (No Special Subject)
Thursday December 17	West Lane Bowling Alley Stockton	December General Meeting Special Subject - On the Water

2021 Calendar of Events

January 21	TBA	Annual Banquet
Thursday February 18	West Lane Bowling Alley Stockton	February General Meeting Special Subject - Long Exposure
Thursday March 18	West Lane Bowling Alley Stockton	March General Meeting Special Subject - Fog
April	TBA	April Workshop/Photo Opportunity
Thursday May 20	West Lane Bowling Alley Stockton	May General Meeting Special Subject - Macro/Close-up
Thursday June 17	West Lane Bowling Alley Stockton	June General Meeting Special Subject - Prints Only (No Special Subject)
July 15	West Lane Bowling Alley Stockton	July General Meeting Special Subject - Creative

Stockton Camera Club
February, 2020 Competition Standings
Congratulations to all the winners!!!

PRINT OF THE MONTH WINNER “Deuce the Banded Sandhill Crane“ by Doug Ridgway

DIGITAL IMAGE OF THE MONTH WINNER “Mohave Point“ by Trey Steinhart

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
Joan Erreca	37	28	9	37	0	0	0	0	0	0	0	0
Ron Wetherell	28	28	0	28	0	0	0	0	0	0	0	0
Lanny Brown	0	0	0	0	0	0	0	0	0	0	0	0
Susanne Nichols	0	0	0	0	0	0	0	0	0	0	0	0
Charlene Martin	0	0	0	0	0	0	0	0	0	0	0	0
Brenda DeRoos	0	0	0	0	0	0	0	0	0	0	0	0
Adrian Ferreya	0	0	0	0	0	0	0	0	0	0	0	0
Ricky Ortiz	0	0	0	0	0	0	0	0	0	0	0	0
Albert Rivas	0	0	0	0	0	0	0	0	0	0	0	0
Class AA Standing	TOTAL	OPEN	SS	FEB	MAR	MAY	JUN	JULY	SEP	OCT	NOV	DEC
Christine Blue	38	28	10	38	0	0	0	0	0	0	0	0
Wayne Carlson	38	28	10	38	0	0	0	0	0	0	0	0
Doug Ridgway	38	28	10	38	0	0	0	0	0	0	0	0
Sheldon McCormick	37	28	9	37	0	0	0	0	0	0	0	0
Elizabeth Parrish	36	27	9	36	0	0	0	0	0	0	0	0
Darrell OSullivan	36	36	0	36	0	0	0	0	0	0	0	0
Class AAA Standing	TOTAL	OPEN	SS	FEB	MAR	MAY	JUN	JULY	SEP	OCT	Nov	DEC
Trey Steinhart	40	30	10	40	0	0	0	0	0	0	0	0
Dean Taylor	39	29	10	39	0	0	0	0	0	0	0	0
Joanne Sogsti	38	28	10	38	0	0	0	0	0	0	0	0
Heide Stover	38	29	9	38	0	0	0	0	0	0	0	0
Em McLaren	38	29	9	38	0	0	0	0	0	0	0	0
Sharon McLemore	0	0	0	0	0	0	0	0	0	0	0	0

2020 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

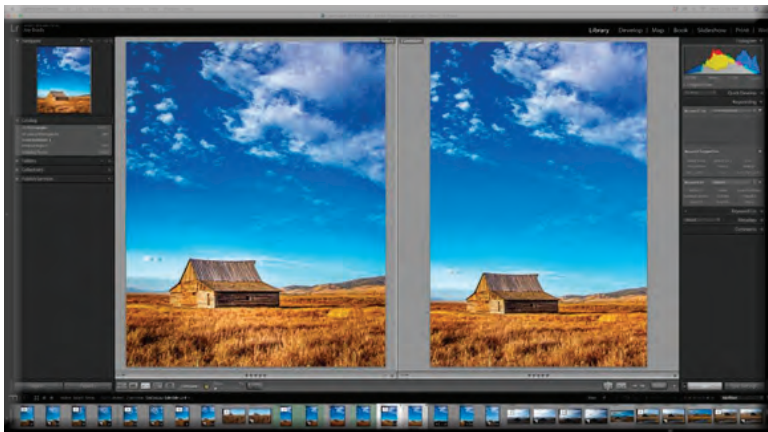
1. Digital images must be submitted in a format and by the deadline specified by the Competition Vice-President. Digital images may be submitted by email, mailed (CD) or delivered (CD) to the Competition Vice-President. Definition of Digital Image: An image taken with a digital camera, a negative, slide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

Cool Tool Review and Video Demo Photoshop's Content-Aware Scale

By Joe Brady

**"There is nothing worse than a sharp image of a fuzzy concept."
Ansel Adams**

While most Photoshop users are well familiar with Content-Aware Fill, Content-Aware Scale is a tool often overlooked. This is a shame because it has lots of use and can really add to image compositions that don't quite work - usually because nature or the environment didn't cooperate.



Here's the result after using Content-Aware Scale (left) and the original on the right.

[Click Here for the video showing the first usage shown above!](#)

There are primarily 2 times I find myself using this tool:

1. I need to fit an image into a standard frame size, but if I simply crop, some important of desired element gets cropped out. Most often for my landscapes, this means some clouds that I really like would get cut off.
2. The perspective from where the image was captured resulted in too much middle ground and caused a separation from foreground to distant elements. This can happen when you are on a hill overlooking a scene and there is a bunch of open space between an interesting foreground and a background main element. Under normal circumstances this could be fixed by squatting down and re-taking the picture, but when this isn't possible, Content-Aware Scale can work its magic!

Now simply describing the use of this tool simply wouldn't do, so I've recorded a video for you so you can see a sample of the first instance above in action.

For the second scenario, it gets a bit more involved, but if you have my Software Training Course 2-3, Photoshop Landscape Advanced 2, the complete demo is #3 Stirling Castle Content Aware and Masking. In this tutorial, Content-Aware Scale is used just in the middle of an image.

In this photo you can see that the field in between the pond (with Coo!) and the hill with the castle is too wide. This causes a separation of the foreground and distant elements. This would have been easier to fix by simply squatting down lower, but because of a hill, a fence and brambles, getting lower was not an option.

By using the content aware scale tool on the middle of the same image, the mid-ground compression brings all the elements together much better. I waited for a bit, but the cow made it clear that it had



Stirling Castle, Stirling Scotland - with an obstinate "Heilan Coo"! Doesn't that look a lot better?!



all day and was not going to move! By the way, the local name for these creatures is "Heilan Coo".

I hate showing you the results of this edit and leaving at that. It seems mean to tease you with just a before-after of the image and I can't do that to you, so here you go - [a private link to the full demo](#), just for FotoFriday Readers! This link will expire in two weeks, so get it now!

If you find these kind of in-depth image enhancements interesting, visit my [Software Training Courses Page](#) and make them yours forever!

Close-Up And Close To Home

Inspiration is in the details
for the indoor/outdoor photographer

Text & Photography By [George Lepp](#)



Gerbera. A complete rendition serves as a starting point for a series of closeup/macro photographs of a Gerbera daisy, native to South America, Africa and Asia but sourced from a local grocery store. There are always pictures within pictures, as demonstrated by the additional images of the subject appearing with this article.

Canon EOS RP, Canon EF 100mm f/2.8L USM macro lens, two Lume Cubes for lighting. Exposure: 1/180 sec., f/8, ISO 250.
Thirteen focus-bracketed images.



Daisy Detail 1. At 2x magnification, the daisy's fine detail is revealed.

Canon EOS RP, Canon EF 100mm f/2.8L USM macro lens and Canon EF 2x extender, two Lume Cubes for lighting. Exposure: 1/60 sec., f/5.6, ISO 250. Seventy focus-bracketed images.

The title of this magazine notwithstanding, not all great nature photography happens outdoors. Last year, I needed to stay close to home as a caregiver for Kathy and her new knee. That didn't mean that I stopped doing my nature photography, however; I just changed the scale of the subjects.

If you're not able to roam the landscape due to your own medical limitations, the needs of those you love, the weather or aversion to travel, there's still natural beauty to be appreciated, new techniques to be mastered and new creative approaches to be applied to your passion for capturing and conveying the spirit and splendor of natural subjects. Here are some tips and techniques for satisfying indoor photography projects.

Close-Up Subjects

I enjoy flowers, insects (butterfly wings), feathers and minerals, so that's the direction I head. It's always spring somewhere, and the floral department at my local supermarket supplies a lot of my subjects any month of the year. Get flowers with great pigment and design or complex structure. One of my favorites is the omnipresent gerbera daisy, but seasonal examples such as peonies, gladiolas and iris are always good subjects. Flowering potted plants last longer. Orchids, while they may be a bit

more expensive, are well worth the extra cost due to their detail and color.

Butterfly specimens, with magnificent color and texture, are fascinating and challenging subjects. I buy mine from a reputable supplier that does not source them from the wild: The Butterfly Company (thebutterflycompany.com) offers not only butterflies but moths, beetles and other insects. Prices vary, but less-exotic species with exquisite color can be had for as low as \$5 each. (I did notice one at \$1,200!)

Feathers offer color, design, texture and rhythm. When I'm outdoors, I'm always on the lookout for cast-off feathers that may photograph well, but beautiful specimens also may be found at fly shops and art stores. Again, do not purchase feathers that have been sourced from the wild or participate in the exploitation of threatened species.

Minerals can be very interesting and challenging. Crystallized rock formations offer complex depth, highlights, mysterious color and patterns. They are works of art in their own right and can be both challenging and satisfying to photograph at high magnification.

Macro Technique

Studio macro photography has certainly evolved over the decades, with several rapid and significant advances in recent years. The problems to be solved remain the same: The tiny nature subjects we value for their complex structure and design are difficult to capture because depth of field is minimal when photographing at high magnification, and in the past it was pretty much impossible to get a subject, whether a flower blossom or crystal, in complete focus. The technique of focus stacking—and its incorporation into recent cameras—has dramatically improved high-mag capture, and it's the next new thing that serious nature photographers need to master.

Focus stacking, also called focus bracketing, enables essentially unlimited depth of field. It is achieved by capturing a series of images at different focus points, moving through the subject from foreground to background, overlapping the depth of field

from one capture to the next. Be thorough. You can take too few images but not too many. The process may be accomplished by changing the focus on the camera manually from one image to the next, which works to about 1x; by moving the subject, positioned on a microscope stand, toward or away from a fixed camera; or by moving the camera in minute increments from one capture to the next, a method greatly facilitated by the Cognisys StackShot (cognisys-inc.com) electronically controlled focusing rail. The StackShot capture interval ranges from 8 inches of depth to the high-magnification ionosphere, with movements as small as 2 microns per shot. I've used it to 20x.

Once photographed, the set of images is composited in post-capture software that retains only in-focus information. The three main compositing programs to consider are Photoshop CC, Zerene Stacker (zerenesystems.com) and Helicon Focus (heliconsoft.com). The result is an image with complete depth of field and astounding resolution.

Faithful readers will recall the complex and bulky setups I used to haul out into the storm to capture the intricate detail of individual snowflakes. Now, just as in-camera exposure bracketing facilitated HDR capture a few years ago, in-camera focus bracketing makes it easier to accomplish focus stacking. For the images seen here, I used the Canon EOS RP mirrorless camera's focus bracketing feature to achieve magnification up to 2x. And it's the perfect technique for indoor nature subjects.

Mirrorless Macro Advantage

Mirrorless cameras have a few advantages for closeup photography, with the camera always showing the image live on the LCD, having a bright electronic viewfinder when the shutter speeds are getting slow, and the afore-mentioned focus-bracketing support (available as of this writing in the Canon EOS RP, Nikon Z 6, Z 7 and D850, Olympus OM-D and Panasonic Lumix G95.) In reality, any camera will do—just do it.

In the digital era, we can check exposure, composition and sharpness on the camera's LCD as we work. But some cameras support WiFi transmission to a smartphone or tablet, from which you can view what the camera sees and control the capture, eliminating camera contact and movement. I have for years used the CamRanger for remote capture of macro, landscape and wildlife subjects; from my larger iPad Pro, I can check focus, sharpness, exposure and even use it for focus stacking with some camera and lens combinations. The company (camranger.com) will be coming out with an improved version II by the time you read this.



Daisy Detail 2. A different composition within the gerbera, captured at 2x magnification. Canon EOS RP, Canon EF 100mm f/2.8L USM macro lens and Canon EF 2x extender, two Lume Cubes for lighting. Exposure: 1/60 sec., f/5.6, ISO 250. Sixty-five focus-bracketed images.

Lenses For Macro

Our indoor setups are mostly aimed at close-up and macro photography, so a macro lens is the best possible solution. But a good alternative is a set of auto extension tubes. These tubes, available either from your camera/lens manufacturer or an outside source, will allow most lenses to focus closer (giving you more magnification) and still maintain the auto-exposure features of the camera and lens. Some very interesting close-ups can be done with wide-angle lenses and a small extension tube (no more than 12mm), but that's a long story for another column. For some of the techniques I use, it's advantageous to have a tripod collar on the lens so you can compose the image by rotating the camera and lens combination. Some macro lenses come equipped with the collar, and for others it's an accessory.

If you're a Canon user, you'll want to look into the MP-E 65mm f/2.8 1-5x macro lens. This unique lens works from 1x to 5x with excellent sharpness. And don't forget that 1.4x, 1.7x and 2x tele-extenders are great macro tools that increase your magnification by the power of the extender. With the Canon 65mm macro lens, I can get a sharp 10x image.

Your Home Macro Studio

Indoor spaces typically contain unnatural distractions and backgrounds, so you'll need to set up a little studio for your work. Nothing large or extravagant is needed. A table or counter space backed with poster board or a mini sweep using roll paper will work. Even better is the kind of tri-fold card often used for school science projects, providing a neutral black or white background where light can be controlled. These materials are inexpensive and available at office and art supply stores.

You'll need to hold the camera steady at higher magnifications and fine-tune its position. One of my favorite setups is a short tripod with a Really Right Stuff ballhead and a multi-purpose rail to adjust the camera/lens up and down or forward and backward.

Accessories to position your subjects include small clamps and adjustable hobby bases. Those designed for holding small objects for soldering, such as the Helping Hands Third Hand Soldering Station, are good examples at a cost of around \$20 and up. For

larger subjects, such as a long flower stem, I use the Plamp II, which is available from Wimberley (tripodhead.com). You'll find many uses for the Plamp when you're working outside, too.



Lighting For Close-Ups

With these subjects, it's all about the light. (Ever heard that before?) Thinly sliced specimens need strong light from behind, and shiny crystals look best with cross-polarized light to eliminate the many reflections.

But we're working small, so no expensive large studio lights are needed. You can use your hot shoe camera flashes, usually off-camera and diffused to cut back the power or soften hard shadows. Most of the camera manufacturers and some accessory providers offer macro multi-flash systems. I have generally preferred smaller macro flashes over larger hot-shoe versions. More recently, I've chosen LED constant lighting because in some cases flash isn't an option. For example, in-camera focus bracketing requires a continuous light source, which also enables you to preview the effects of your lighting setup.

I've been experimenting with inexpensive LED photo lights and LED book lights for some time. Most use batteries or are rechargeable, which makes them mobile. All offer color rendition close to daylight, and photographing in RAW gives you the option to tweak the color temp in post process. Lately, I've been using Lume Cubes for a lot of my flower setups (lumecube.com). These

Cross Polarization. Distracting reflections from illuminated crystal formations on this geode are controlled with a cross-polarized lighting technique: placing polarizing material over the three Lume

Cube light sources and a polarizing filter on the lens.

Canon EOS RP, Canon EF 100mm f/2.8L USM macro lens.

Exposure: 1/15 sec., f/8, ISO 200. Sixty-three focus-bracketed images were composited to achieve sharpness throughout.

are intense, small (3.5 ounces, 1.5 inches square) cubes with 10 power light settings and a number of accessories (diffusers, snoots, barn doors and filter holders) to put the light where you want it, and there's a 1/4-20 thread in the cube's base to attach them to small ballheads. They last about 20 minutes at full power to 45 minutes at 80 percent, and two hours at 50 percent. Recharge time is 45 minutes to an hour. It's a mobile light studio in a small case. One caveat is that they get pretty hot if left on for a long period of time while you set up, focus and shoot a series of focus brackets.

Extra-Curricular Techniques

Another technique that will give you many hours of creative photography is to arrange a few simple subjects, take a series of rotating captures, and composite them into a final image that shows complexity and symmetry. Have I piqued your interest? The capture and composition process is detailed in an article I co-wrote on Digital Photo with fellow creative photographer Ron Palmere, [Creative Capture For Clever Composites](#). Give this technique a try.



[George Lepp](#)

One of North America's best-known contemporary outdoor and nature photographers and a leader in the field of digital imaging and photographic education, Lepp is the author of many books and the field editor of *Outdoor Photographer* magazine. One of Canon's original Explorers of Light, Lepp finds inspiration in advancing technology that fuels creative innovation and expression of his life-long fascination with the natural world.

Best Travel Lens

How to Select the Right Travel Lenses for Any Brand

By [Viktor Elizarov](#)



If you are looking for the best travel lens to bring on your next vacation or once-in-a-lifetime hiking adventure, you have come to the right place.

In today's article, I will share how I approach lens selection for my travels. I developed a particular lens selection method that worked for me when I shot with Canon and Sony. It works for me today as I shoot with the Fujifilm brand.

First, the key point when selecting the best lens for travel photography is to align your selection with the type and style of travel photography that you enjoy the most. I am confident that my travel lens selection method will help you.

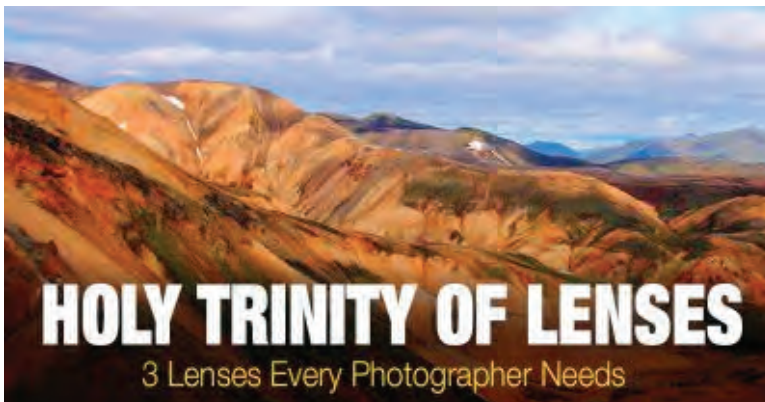
Defining the Best Travel Lens

If you ask 10 different travel photographers to define what constitutes the best travel lens, you will likely get 10 different answers.

For example, someone who is leaving for a two-week hiking trip in the mountains will have a different lens selection than a photographer exploring Iceland in a camper van.

The Holy Trinity Lens Selection Approach

There is a popular approach to lens selection called the "Holy Trinity." If you assemble three lens kits with the following characteristics... 16-35mm f/2.8 - 24-70mm f/2.8 - 70-200mm f/2.8 ...the kits will work for pretty much any type of photography.



Holy Lens Trinity

The "Holy Trinity" kit covers an incredible focal range from 16mm to 200mm. And, since the kit includes fast f/2.8 lenses, you can easily increase the zoom range by using Lens Teleconverters. The 1.4X teleconverter will extend the reach of the 200mm lens to 280mm and the 2X teleconverter will extend it to 400mm.

You can use a kit like this for any type of photography—from astrophotography to wildlife, sports photography, and everything in between.

I call this a "just in case" lens selection approach.

The "Holy Trinity" approach does not work for me because I am a minimalist about my photography equipment. I prefer to bring only essential gear with me and leave "just in case" items at home.

Here is my straightforward strategy for lens selection for my travels.

Travel Lens Selection Questionnaire

I ask myself a simple question:

"If I had to go on an extensive two to three-week trip and could only bring one lens, what lens would I take?"

When you set such strict boundaries for yourself, the answer about what constitutes the most versatile and valuable lens for your travel photography becomes straightforward.

Once you define your number one travel lens selection, you move to the next step of the selection process.



Shot with Fujifilm XT2 and Fuji 18-135mm lens



Shot with Fujifilm XT2 and Fuji 10-24mm f/4

You ask yourself another simple question:

“If I had to go on an extensive two to three-week trip and could only bring two lenses, what lenses would I take?”

Since you pinpointed your first choice in step one, all you need to do is select a second lens.

Finally, you repeat the same exercise once more by asking yourself:

“If I had to go on an extensive two to three-week trip and could only bring three lenses, what lenses would I take?”

I usually stop at this point because I rarely take more than three lenses on my travels.

My Travel Lens Selection

Let me demonstrate how my travel lens selection method works for me. In my travels, landscapes are the most critical part of my photography. Cityscapes are my second choice. Street photography and environmental portraits

are the third most important part of my travel photography.

When I select my ideal travel lens, I ensure it covers all areas of my travel photography: landscapes, cityscapes, street, and environmental portraits.

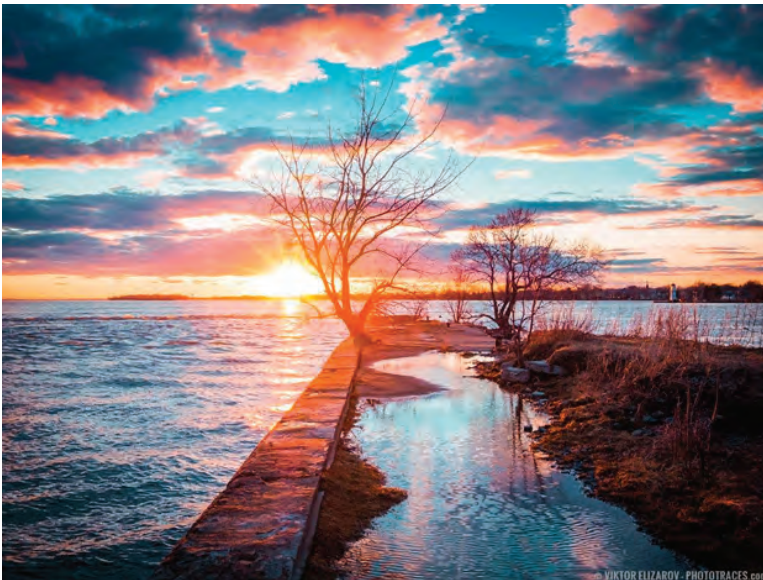
My Travel Lens Selection #1

This makes lens selection very obvious, regardless of what camera brand I use:

For a full-frame camera, it would be a 24-105mm f/4 lens.

For a crop sensor camera, it would be a 16-70mm f/4 lens.

The 24-105mm (16-70mm) lens is wide enough to shoot landscapes and cityscapes. If I need to shoot a much wider scene, I can shoot multiple frames at 24mm (16mm) and combine them into a wide-angle panorama.



Shot with Fuji 10-24mm f/4

This type of lens covers the following focal lengths—24mm, 35mm, and 50mm—which are perfect for street photography.

Finally, I can achieve a decent bokeh effect when shooting portraits at 105mm f/4.

My Travel Lens Selection #2

My second choice would be a wide-angle zoom lens that would be used exclusively for landscape photography.

For a full-frame camera, it would be a 16-35mm f/4 lens.

For a crop sensor camera, it would be a 10-20mm f/4 lens.

My Travel Lens Selection #3

My third choice would be a fast, prime lens that I can use in low light conditions for portraits and street action.

For a full-frame sensor, it would be a 50mm f/1.4 prime lens.

For a crop frame sensor, it would be a 35mm f/1.4 prime lens.

Please note that my lens selections are very similar regardless of the camera brand I use.

General Requirements for the Ideal Travel Lens

Since I do not know what specific camera brand you use, I want to give you a few general requirements to look for when selecting a travel lens. Later, I will provide specific lens recommendations and we will run them against the requirements.

1. Compact Size and Weight

Ideally, you want a travel lens that does not break your back and does not attract unwanted attention. For that reason, I never switched to a full-frame setup. Even though I love Sony’s full-frame cameras for their versatility and image quality, the size and weight of full-frame lenses were always a prohibitive factor for the switch.

2. Useful Zoom Range

For my ideal travel lens, I always choose a zoom lens over a prime lens. I refuse to fiddle with multiple primes. I prefer to have one zoom lens that covers the most useful focal length and stick with it.

Plus, in recent years, zoom lenses have drastically improved in optical quality, making them almost as good as prime models.

3. Good Image Quality

When you bring only one lens with you for a once-in-a-lifetime travel adventure, you must ensure your lens does not compromise the quality of your captured memories.

4. Effective Optical Image Stabilization

Most of my landscapes are shot on a tripod using aperture values between $f/8$ and $f/11$. As a result, I do not carry faster $f/2.8$ lenses because $f/4$ is good enough for me. But, in case I need to shoot handheld in low-light conditions, optical stabilization becomes indispensable.

In general, efficient image stabilization extends the usefulness of any lens.

5. Suitable for at least Three Types of Photography: Landscapes, Street, and Portraits

This point is self-evident. You do not want a “one-trick pony” as your primary lens.



Shot with Fuji 10-24mm $f/4$

6. Wide Enough for Vast Landscape Scenes

I find that, for my photography, the sweet spot is 24mm on a full-frame sensor or 16mm on a crop sensor camera. I would not go any narrower than a 28mm and 18mm.

Even though I like ultra-wide-angle lenses (15-20mm on full frame and 10-15mm on APS-C), at such a focal length you reach an area of perspective distortion where the foreground elements of the scene appear much larger than in reality. At 24mm, the distortion is minimal and almost unnoticeable.

These days, I often use a 20-24mm focal length to shoot ultra-wide scenes instead of using a 15-18mm. Since I cannot fit the entire composition into one shot, I take multiple shots with 24mm and combine them into a wide-angle panorama in Lightroom.

I find these wide-angle panoramas look more natural without the distraction of a perspective distortion.

7. Durability

This is another self-evident point. When you are in the middle of nowhere, the last thing you want is to lose your main lens.

8. Weather Sealing

One of the reasons I switched from Sony to Fujifilm is to have a true travel setup. For a long time, I dreamed of having a full weather-sealed camera and lens combo. This was impossible to achieve with Sony APS-C cameras.

After traveling to the Pacific Coast of the United States and Hawaii on many occasions, I realized that my equipment was always at risk of being ruined by the saltwater dust that is always present in the air. Since then, weather sealing became one of my top priorities for cameras and lenses.

What is the Ideal Travel Lens?

There is no such thing as the perfect lens. There is always a compromise on certain aspects. So, you simply select the model that checks most of the requirements and ignore the lesser-important details.



Super Sharp. Lepp used the Focus Bracketing function of the Canon EOS RP mirrorless camera to capture 80 focus-stacked images of a single primrose blossom, achieving extreme depth of field at 2x magnification. Canon EF 100mm f/2.8L Macro IS USM with and without a Canon Extender EF 2X III. Exposure: 1/125 sec., f/8, ISO 400.

In-Camera Focus Stacking

Plus, cropping versus smaller sensors
and file size considerations

Text & Photography By [George Lepp](#)

In-Camera Focus Stacking

Years ago, I was asked by the folks at Canon what features I'd like to see in future cameras, and one of my suggestions was an automated focus-stacking capability—dramatically increasing an image's depth of field by combining multiple captures taken at different focus points. I've been using and writing about the manual technique, for both landscape and macro subjects as small as snowflakes, for several years. Now the industry has incorporated in-camera focus stacking features in a number of ingenious ways; it's offered cameras including Panasonic LUMIX, Olympus OM-D, Nikon's Z 6, Z 7 and D850, and Canon's new entry-level, mirrorless full-frame EOS RP camera.

I got my hands on a Canon EOS RP and started experimenting with its In-Camera Focus Bracketing feature. The method incorporated into the EOS RP moves the focus elements inside the lens at incremental distances based on the focal length, aperture and camera settings. In the camera's menu for focus stacking, the photographer can control three variables: Number of Shots, Focus Increment (1 to 10 scale, with larger numbers indicating larger focus increments) and Exposure Smoothing.

The number of shots and focus increment you choose will vary depending upon the lens being used, focal length, magnification and positioning of the depth of field within the image; you have to experiment with the many possible combinations. For example, adding depth of field to a landscape at 50mm and f/11 might require three shots at the upper end of the increment scale, while at high magnification, where depth of field is extremely shallow, the photographer might select 40 or more shots at the lower end of the scale.

Exposure Smoothing, when enabled, automatically compensates for changes in image brightness from one capture to the next. Note that focus stacking requires a consistent frame and motionless subject; a tripod is needed. As with manual focus-stacking techniques, the in-camera capture sequence is later transferred to computer-based software for compositing into a single high-definition image.

In my initial test of the in-camera technique, I used the EOS RP to take macro shots of some flowering plants. I used a Canon EF 100mm f/2.8L USM macro lens set to just a bit less than 1x. At high magnification, depth of field is extremely shallow, so in the Focus Bracketing Menu, I selected 40 shots, with the focus increment set to number 4 on the scale. I disabled Exposure Smoothing as recommended in the manual for the Canon 100mm and 180mm macro lenses. I set the aperture to f/8 because that is an optimum setting for sharpness with this macro lens, and I set the camera mode to Aperture Priority. Lighting came from a small LED light panel, as flash is not possible using this function.

A factor to consider when selecting the focus increment is that to achieve sharpness, the in-focus areas of the stacked images must overlap. If you choose too large an increment, the image may be softened. If you choose a smaller increment, however, be aware that an increased number of shots will be needed to cover the target area. It is my experience that you can never have too many shots in focus stacking, but you surely can have too few, which affects sharpness and possibly causes out-of-focus banding in an image.

The output images from the EOS RP can be in RAW or JPEG format; considering the number of images often required to complete the task, I usually work with large JPEG files when focus stacking.

Having completed the test at 1x with excellent results, I took it one step further and added a Canon EF 2x III extender to the 100mm macro for just a bit less than 2x magnification. I adjusted the number of images to 140 and the increment scale to 3, and the Focus Bracketing in the EOS RP still worked perfectly. Keep in mind that the depth of field at 2x is only about 0.4mm per image. The results were excellent and significantly easier and more precise to accomplish than with my earlier methods of incrementally moving the focus, the camera or the subject to capture the necessary range of images for maximum depth of field.

To expand my knowledge beyond Canon, I went to a friend who has both a Nikon Z 6 and Z 7, both cameras featuring what Nikon calls Focus Shift Shooting. The Nikon D850 also has this capability. We set up the Z 6 and accomplished the same series of images that I had done with the Canon EOS RP, also with great results. Nikon has added a few additional capabilities to its Focus Shift Shooting. You can use most any Nikon lens that has autofocus (Canon has a select group that work with Focus Bracketing), there is the possibility of changing the interval between shots in the series so flash can be used, and you can lock the exposure on the first image. But keep in mind that the Nikon Z 6 is almost twice the price of the Canon EOS RP, and the Z 7 is three times the cost.

With either brand, once the series is captured, the images must be composited in the computer with stacking software. For Canon users, Digital Photo Professional 4 will do the compositing (this software comes with the camera at no additional cost), while photographers who have already been working with this technique may prefer specialty software such as Photoshop CS, Zerene Stacker and HeliconFocus. I would recommend the latter two for the best result.

The beauty of this camera function is that it offers precise focus-stacking capabilities right in the camera for landscapes and macro, even up to 2x. There's no moving the camera, manually changing focus, or repositioning the subject. It's ready and able all the time. And regardless of your preferences for manufacturer or post-capture assembly, the resulting images will be sharper, have the precise amount and positioning of depth of field you want, and will greatly increase your technical and creative options.

Crop Now Or Later?

I have two cameras, a full frame and a crop sensor (APS-C). The crop sensor will give me a magnified view (1.6x) but contains less digital information. If images were taken with the two cameras using the same lens (my 400mm), and I crop the full-frame image to match the image that I attained with the smaller sensor, which image would be sharper?

–J. Terkel Via the Internet

This is an interesting question that goes to the heart of choosing and using digital cameras optimally in various photographic situations. But first, let's look at all the variables that can affect the outcomes, beginning with differences in pixel counts. Among the current models, most cropped sensors (APS-C size) are around 20 megapixels, and the full-frame could range from 20 to 30MP or more.

Assuming that the APS-C sensor (with a 1.5x to 1.6x crop factor) has 20MP resolution and the full-frame sensor has 30 MP, when the resulting full-frame image is cropped to match that obtained from the APS-C sensor, the two files will contain approximately the same amount of data and comparable sharpness. If the full-frame camera has a higher resolution, such as 46 or even 50MP, then the cropped image from the full-frame camera will contain more detail—an important advantage when the files are enlarged.

If the full-frame camera has a lower resolution, similar to that of the APS-C camera being compared, the full-frame camera may still have the advantage because its pixels are larger, offering better low-light capability and less noise at higher ISOs. Considering these factors, it's likely that the full-frame crop will still be as good, or superior to, the smaller sensor's file.



Grub Grab. Lepp captured this image of a bald eagle feeding its chick on 4K video from a distance of more than 200 feet. The photograph is a frame grab from the video clip, with a file size equivalent to that produced by a 6MP camera (18 MB). The clarity is excellent, sufficient for publication, social media or a print up to 13×19 inches. Canon EOS R, Canon EF 600mm f/4L IS III USM, Canon Extender EF 2X III. Exposure: 1/350 sec., f/16, ISO 1600.

Of course, when it comes to getting the shot, the APS-C camera will likely have a few advantages of its own. Because the camera is processing smaller files, it may capture more frames per second. Some have great autofocus capabilities, and the bodies may be smaller in size, and thus more easily and quickly positioned.

So how do you choose the best option? For me, the decision is always made on image quality. For better quality at higher ISOs, whether needed for faster shutter speeds, more depth of field (a smaller aperture) or low-light conditions, the full-frame camera usually wins. But read on for another perspective.

How Big An Image File Do You Really Need?

Is a larger image file worth the cost of large sensors, higher resolution, extra sensitivity and lots of technical calculations? The most practical (if not most aesthetic) answer is, it depends on how the images will be used.

As faithful readers know, I've been working for years on a project to document a bald eagle nesting site not far from where I live in Central Oregon. I pride myself on being able to accomplish full-frame images of the nesting activities from a distance of more than 200 feet. This means I use long lenses (500mm, 600mm and even

800mm) in conjunction with 1.4x and 2x extenders. Not many folks have access to, or are willing to haul around, this kind of photographic gear.

Yet my photographer and bird-watching friends come out to photograph the nest with 100-400mm lenses (sometimes with a 1.4x attached) and send me excellent close-up images that rival my megabuck, mega-millimeter images. It's because sharing images through email or social media requires only a very small file, which allows the photographer to crop extensively...if the original capture is well-exposed and sharp.

So, depending upon your ultimate use, you may have a lot of leeway in cropping beyond the actual reach of your equipment. Don't be afraid to reduce the image size to enlarge the subject or improve composition for web-based sharing. What if you have a home printer or send your images to a professional printer for enlargements? You will be surprised at what is possible even in these situations.

How small can you go? I enjoy demonstrating the capability of using a program such as Photoshop or Lightroom to extract single frames from 4K video clips, then creating beautiful 13×19-inch prints from the frame grab. Those individual frames are equivalent in file size to a single photograph captured with an 8MP camera. While we may insist upon 20 to 50MP frames from our DSLRs, the frame-grab exercise demonstrates that you can crop a 20MP camera image to 50 percent of the original file with great results for display as moderate enlargements and on social media.

So why do I employ the large full-frame cameras and monster lenses? It's about big prints: In order to make really impressive prints for display, I still need sharp, well-exposed, large files, and while I can rarely predict the future use of any capture, I never want to limit my options.



[George Lepp](#)

One of North America's best-known contemporary outdoor and nature photographers and a leader in the field of digital imaging and photographic education, Lepp is the author of many books and the field editor of *Outdoor Photographer* magazine. One of Canon's original Explorers of Light, Lepp finds inspiration in advancing technology that fuels creative innovation and expression of his life-long fascination with the natural world.



Visualizing Your Scene in Black and White



For the modern-day photographer, the world is a kaleidoscope of color. It can be captured in the green blades of grass that emerge after a long, chilly winter; the turquoise waves that gently lap against a sandy shoreline; and the fiery reds, yellows, and oranges that illuminate a warm summer sky. Photography has come a long way since its humble beginnings — a romantic, almost mysterious time when images could only be captured in black and white. Without color to enhance the warmth of a scene, photographers simply had no choice but to view the world around them in shades of gray, honing in on interesting tones, shadows, and shapes to make their images come to life.

While it's simple — practically second nature — to capture your favorite photos in vibrant colors, photographers today must make a deliberate choice to shoot in black and white. Learning how to visualize your scene in a stripped down, monochrome palette is arguably one of the best ways to challenge (and enhance!) your photography skills. Here's why:



Black and White Minimizes Distractions

When an image is photographed in color, the human eye can get easily distracted by the competing shades surrounding your subject. The blue sky, the green grass — even the color of a person's clothing — can all make a huge impact on the complexity of your scene. Black and white photography eliminates the need to seek out bright, vibrant colors, and instead allows you to focus on key elements that are more pronounced in black and white, such as shapes, lines, patterns, and textures. The age-old adage here is true: less is more.



Black and White Accentuates Areas of Light and Dark

In color photography, direct sunlight often produces harsh shadows and uneven colors. But in black and white photography, areas of high and low contrast — in other words, varying shades of white, gray, and black — add depth and dimension to your scene. You'll have the freedom to explore all kinds of light, ranging from bright midday sun to dark, overcast clouds. In monochrome, fog lifting across a gloomy mountainous landscape, for example, creates a mysterious scene, while shadows cast on a sunny pier form artistic, moody silhouettes. By shooting in black and white, you'll learn how to scope out bright whites (light colors) and deep blacks (dark colors) to produce bold, dramatic results.



Black and White Evokes Emotion

Photos take on a life of their own when snapped in black and white. Imagine the intimate moment when a groom sees his bride for the first time. Captured in color, your eyes might be attracted to the groom's blue tie, his colorful boutonniere, or the bright colors of the wedding venue. But photographed in black and white, your eyes naturally shift focus to the groom's joyful expression or his tear-filled eyes. This emotional, tug-at-your-heartstrings moment is exactly what the photographer had aimed for. The absence of color helps emphasize powerful emotions that look more drastic, striking, and timeless in black and white.



Black and White Highlights Intricate Details

When colors are omitted from a scene, details suddenly come alive. In black and white photography, these details often include sharp lines, interesting shapes, and intricate textures. Portrait photographers gravitate towards black and white photography to highlight subtle features that are sometimes lost in color, such as a freckled face, a raised eyebrow, or a patch of delicate, wrinkled skin — all qualities that add character and charisma to your subject. Similarly, landscape photographers transform their images to black and white when attention to detail is critical. An old cobblestone street, a weathered brick wall, and an abandoned farmhouse all have strong architectural features that are simply hard to miss in black and white.

Black and White - Expands Your Photographic Eye

There's a reason black and white photography is still in existence today: it expands, challenges, and inspires our photographic eye. The simplicity of black and white photography can be deceiving — without color, we're forced to pay more attention to subject, composition, and light. This careful observation allows us to shift our focus and envision our surroundings in a refreshing