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The Newsletter of E.J. Peiker - Nature and Travel Photography

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Welcome to the 21st year of the photography newsletter from E.J. Peiker, Nature & Travel Photography and [www.EJPhoto.com](http://www.EJPhoto.com). In this quarterly publication, I share with fellow photographers my photographic experiences, photo equipment reviews, photography tips, processing tips, and industry news. All content is copyrighted by E.J. Peiker and may not be reproduced but it is permitted to forward this newsletter in its entirety only. If you would like to be added to the mailing list, unsubscribe, or access back issues, please visit: <http://www.ejphoto.com/newsletter.htm>



Milky Way over Great Basin National Park – Nevada (a1, 14mm)

## September = New Gear Announcements

Historically, September has been the month where most new photographic gear was launched. For 70 years, the largest photography trade show was held in September in Cologne, Germany and this was the place where manufacturers launched their latest gear. At its peak Photokina had nearly 1600 of exhibitors spanning numerous show halls and hosted 170,000 visitors in four days. Photokina started scaling back considerably in the latter part of last decade as the photography industry started into a “recession” brought on largely by cell-phones taking over all but the higher end market and digital camera saturation – where everybody that was ever going to buy a digital camera already had one and the business became largely replacement and upgrade oriented. Photokina was cancelled in 2020 due to the COVID-19 pandemic and is now on indefinite hold as the industry continues to shrink and photo equipment manufacturers can’t even ship products launched more than a year ago due to electronic component and manufacturing supply shortages. Despite the loss of Photokina and the problems delivering announced gear, September is still a month that has a larger than usual amount of product announcements in hopes of stoking holiday sales.

This year, several notable products were announced that may interest my newsletter audience which consists largely of wildlife, landscape and travel photographers:

Fujifilm:

Perhaps the most notable announcements, surprisingly, came from Fuji which introduced significant products for both their medium format GFX line and their APS-C X line. Finally, after years of waiting, a wide angle zoom has finally been introduced for the 44x33mm medium format system - the 20-35mm f/4 lens. This lens will produce the full frame equivalent of a 16-28mm field of view with a depth of field equivalent aperture of about f/3.2. When coupled with the 32-64mm f/4 (25-50mm equivalent) or 45-100mm f/4 (36-80mm equivalent), and the 100-200mm (80-160mm equivalent), the GFX camera shooter now has a relative full zoom range for landscape photography. This is the one lens I have been waiting for in the Fuji medium format line since I started shooting this system four years ago and I have pre-ordered the lens.

In addition to the 20-35mm lens, Fuji also shared mock-ups of two tilt-shift lenses designed for architectural and product photography but ones that could also find a use in landscape photography – a 30mm T/S (24mm equivalent) and a 110mm T/S (88mm equivalent).

On the APS-C side of the Fuji camera business, the first truly high resolution X camera was introduced. The 40 megapixel X-H2 is essentially the same camera as the 26 megapixel X-H2S launched a few months ago but with a 54% higher resolution sensor. Due to the slower readout of more pixels the camera is a bit slower shooting but at 20 FPS with electronic shutter and 15FPS with mechanical shutter but it still has plenty of frame rate for even bird photographers. The outstanding question will be if the slightly slower readout of the 40 megapixel sensor can provide the autofocus performance for fast action.



Early reports indicate that there is a difference but it may not be enough to matter in the vast majority of situations. It does offer both animal and bird eye detection as well as automobile, bike, motorcycle, airplane, and train AF detection. If the AF performance proves to be good in real world usage, coupling this 1.5x crop camera with the excellent Fuji 150-600mm zoom would provide a full frame equivalent 225-900mm reach in a very compact and easily hand-holdable system.

In addition to the new camera, Fuji also announced a superfast 56mm f/1.2 lens which is similar to an 85mm f/1.8 in full frame terms.

Nikon:

Nikon launched what is suspected to be its second rebadged and cosmetically changed Tamron Z-mount lens. A few months ago it launched the 28-75 which internally is identical to the Tamron 28-75mm lens for Sony (the first generation lens, not the improved second generation version for Sony). Its specs are identical right down to the exact placement of lens elements and identical optical characteristics, size and weight. Now Nikon launches the 17-28mm f/2.8 which again is internally identical to the exceptional Tamron 17-28mm f/2.8 lens. While Nikon isn't saying it in their press releases, these lenses are both clearly Tamron lenses with some cosmetic changes on the outside. This isn't a bad thing as the Tamron mirrorless optics are truly exceptional and every bit as good as the big three's optics. One does wonder though why the Nikon versions of these Tamron lenses cost a lot more than the same Tamron branded lenses cost with the Sony (F)E-mount... Another clue that Tamron and Nikon have a business partnership is that Tamron has announced the development of Nikon Z-mount lenses – the Nikon mount is highly proprietary and locked to other manufacturers so for them to make a development announcement does smack of a partnership.

Hasselblad:

Hasselblad has finally updated their very cool, but underperforming, by today's standards, X-1D camera. The X1D was stuck at 50 megapixels in a 100+ megapixel medium format world relying on contrast detect autofocus in a phase detect autofocus world. The newly announced X2D aims to bring the Hasselblad 44x33mm sensor medium format camera in-line with the dominant market force Fuji X100S by offering the same sensor and phase detect autofocus sensor but still using the excellent Hasselblad form factor and very easy to learn user-friendly touch screen interface. It also upgrades storage to CF-express Type B which is a step up from the GFX-100S SD card storage format. Overall this is a very compelling camera that I would love to get my hands on but pricing of the camera at \$8200 is \$2200 higher than the equivalent Fujifilm camera and it is much harder to adapt lenses to the Hasselblad option as it does not have a mechanical shutter. You either have to use Hassy's leaf shutter lenses which are double the price of the equivalent Fuji lenses or use an electronic shutter which may lead to some weird distortion as the sensor readout is on the slow side when used on moving subjects.



In addition to the new 100mp camera, Hasselblad released three new leaf shutter lenses – the 38mm f/2.5 (30mm equivalent), the 55mm f/2.8 (44mm equivalent), and the 90mm f/2.5 (72mm equivalent).

The lenses are priced between \$3700 and \$4300 USD. Two of the lenses have a very weird feature; they have traditional depth of field scale markings on the barrel but the focus ring does not show what distance the lens is focused to indicating that they are focus by wire lenses. Presumably one has to look through the viewfinder or on the rear LCD to see what distance the lens is focused at and then consult the depth of field scale on the lens. Wouldn't it make more sense if you just showed on the rear LCD or in the viewfinder the depth of field range for the selected aperture...?

### Arca-Swiss

Arca-Swiss has upgraded their Cube, Core 75, and P-0 geared heads with user selectable click stop spacing at different angles on the panorama swivel part of the head. This allows even and repeatable panorama stitching. The new heads are called the clicPan versions of these heads. I use both the p0 and the Core 75 as my primary landscape photography heads and definitely think this would be a beneficial feature. However, it is definitely not worth upgrading to these \$1000 plus heads to gain this feature but if I were buying any of these heads new, I would definitely get the new clicPan versions.

### The Story Behind the Photo



Cathedral Gorge - Nevada (GFX-100S, 17mm)

Every year in August I take a photo camping trip somewhere in the southwestern or western part of the USA. This year I finally completed a shoot in Nevada that I tried to do a few years ago and could not complete due to blowing out a tire. I was heading to a shoot with my friends Guy Tal and Michael E. Gordon in Death Valley and had planned to spend about 36 hours in Cathedral Gorge in eastern Nevada before meeting up with them. The vehicle I was driving did not have a spare tire - it was equipped with run flat tires. Run flat tires are worthless when you have anything more than a simple flat. In this situation I ran over something that shredded the tire that left the vehicle disabled. Being stranded 170 miles from the nearest place that could replace the tire resulted in having to be flat-bed towed to Las Vegas. By the time I got a flat-bed tow truck to my location, got transported back to Las Vegas and got the tire replaced, a whole day had passed and I was forced to abandon my shoot in Cathedral Gorge and had to hustle to make it to Death Valley on time. Ever since then, I have wanted to go back and shoot this unique landscape in this remote location. However, being gun shy, I didn't want to do it until I had a proper and true four-wheel-drive vehicle with a full-size spare (not an All Wheel Drive or AWD vehicle which is very different and nowhere near as capable). Having purchased a larger full four-wheel drive SUV late last year, I decided to try again. This vehicle that not only meets these requirements but also is long enough in back to equip it with a comfortable sleeping arrangement that is long enough for someone over 6 feet, a fridge and everything I need for photo excursions. I made the 8 hour drive and secured a camping spot with a covered ramada, picnic table, power, and a water source. When I first got there in mid-afternoon, after setting up, I went on a 3.5 mile scouting hike with just my iPhone camera to get an idea of shooting locations in the brief sunset and sunrise prime shooting times. Later that evening I got some nice shots including some Milky Way shots but nothing that I would consider a "portfolio image". The next morning I decided to try a different part of the gorge that I had not scouted before since I hadn't come upon a composition that really excited me the night before. I was also racing time a bit as a line of showers and potential thundershowers were approaching from the west. They were not forecasted to hit until about 9:00AM but I could see the clouds starting to move in from the west. I hiked down the gorge from the north instead of from the south where the campground was and where I was shooting the evening before. While I took many photos that I liked of this interesting landscape, I still didn't get that shot that really excited me - one that I couldn't wait to get back and process. As I kept hiking I could see that I was coming up to the end of the northern part of the gorge where it spills into flatter terrain and decided just to go to the end and then come back to see if I spotted anything that really got my photographic juices flowing from the opposite direction. As soon as I exited the northern half of the gorge and looked west, I saw it. There was a really interesting "peaky" formation and the cloud build up behind it from the coming storm was getting lit up by the rising sun. As I hurried closer, I also noticed great leading line into the shot as this formation had sandstone tentacle that reached out. I spent about an hour photographing this spot. The shot pictured above is my favorite of the series and my favorite of the whole trip which also included Great Basin National Park (the first image in this newsletter) and a section of Grand Staircase Escalante in southern Utah that I had not previously explored.

In a way you could say that this "portfolio" image was four years in the making...

## **Topaz Photo AI**

Topaz Labs is one of the biggest players in the Photoshop Plug-in market and offers a number of products that use Artificial Intelligence algorithms to enhance photos. By far the most useful and most popular among photographers are Topaz Sharpen AI, Topaz Denoise AI, and Gigapixel AI for upscaling images. These programs work as stand-alone products or as plug-ins in Photoshop and some other photo editing programs. Each of these programs has fully automated options and also allows you to customize their settings and algorithms. The sharpening and noise reduction tools provide masking

options to selectively apply these actions to portions of photographs. There are several other less useful “AI” programs in the Topaz AI Suite.

Recently Topaz Labs introduced Photo AI which is designed to automate the effects of noise reduction, sharpening and upscaling in a single automated application. Basically you send a photo to Photo AI either through Photoshop as a plug-in or in standalone mode. The program then applies its own internal artificial intelligence to assess how much noise reduction to apply, what the subject is and how much sharpening to apply. Optionally, the user can ask the program to upscale the image.

I have a standard photo that I use to test applications like this. I took it in the Bahamas where the tripod settled into the beach sand during the exposure resulting in some vertical motion blur:



On the left is the full image and on the right is a small section from the beachfront properties in the distance – as you can see there is significant motion blur from the tripod settling in the wet sand during exposure.

When I feed this image into Photo AI in its fully automated mode, it determines that it needs a mild amount of noise reduction but it misses badly on what the subject is. Here is the mask (in red) that it creates of what it thinks is the subject (ignore the color shift – this is due to using screen captures from Topaz):



It selected a single building even though all of them have the same motion blur. By manually switching the subject detection model to “landscape” it does a better job but, of course, this is overriding the AI making me wonder how smart this AI really is. Unfortunately, switching to landscape detection mode creates another set of problems. First it selects the water which should not have the motion blur corrected as it creates weird repeating wave patterns that are not natural and it still misses portions of the tops of some structures. To fix the missing portions of structures problem, one must manually adjust the subject detection slider until all of the buildings are included but there is no way to eliminate the water from the mask as the program does not provide a brush to eliminate portions where you do not want the effects of Photo AI to be applied. Your only option will be to undo this later in Photoshop through the history brush or to paint off the adjustment in those

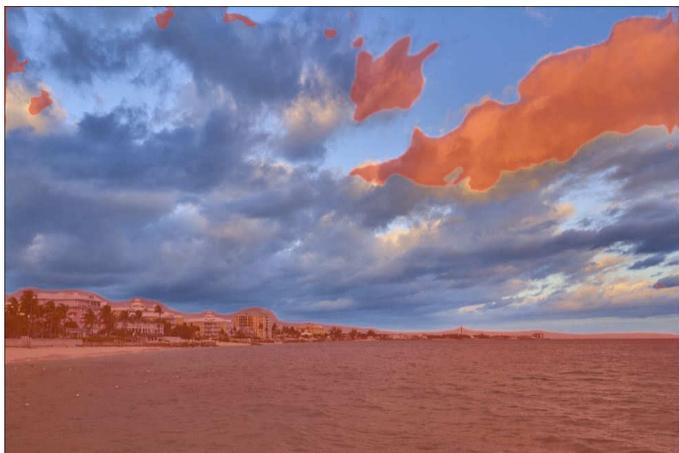
There is no way to eliminate the water from the mask as the program does not provide a brush to eliminate portions where you do not want the effects of Photo AI to be applied. Your only option will be to undo this later in Photoshop through the history brush or to paint off the adjustment in those

areas later if you had created an adjustment layer prior to sending the photo to Photo AI. If you used Photo AI in standalone mode, there is no way to undo the effect on the water later. Here is the mask that the program generates after switching the detection to landscape mode and a magnified view of an area that it missed:



If you let the program process the image at this point, you get an image with buildings that are sharpened but the tops are blurred – not a very good “AI”...

After adjusting the sensitivity via a slider, which is the only way to get it to include the tops of the buildings, you get a mask that incorporates all the buildings but it is starting to pick up the clouds as well:



At this point we have the areas to apply the sharpening selected but the program misidentifies the type of sharpening that is required as “lens blur” rather than “motion blur” and does a sub-par job in its AI mode. Once again, manual intervention is needed to change the sharpening mode to “motion blur” where it does a good job on the buildings, given that they are so small in the frame but the water does not look good – here’s a split screen of both the buildings and the water:



As stated earlier, in order to eliminate the weird sharpening of the water and the clouds, you can use the history eraser in Photoshop to quickly eliminate or reduce this. In the end, the final image looks pretty good and is very usable despite the image initially looking ruined due to the tripod settling in the sand during exposure.

I hadn't run this image through Topaz Sharpen AI in a couple of years and that program has had quite a few updates since then so I decided to do this again. It also misidentified the type of sharpening needed and did a slightly, but not dramatically better job at detecting the buildings as the subject of its sharpening algorithms. The nice thing about Sharpen AI (and Denoise AI) is that there are mask brushes so I can easily select just what I want by drawing a mask that takes just a few seconds. Additionally there are many more sharpening algorithms that I can select. Here is the mask I made Sharpen AI in less time than it took to correct all of the "AI" problems in Photo AI:



In the end, the two tools give a similar result and take a roughly similar amount of time meaning that Photo AI doesn't really save much time since you constantly have to override the AI. Sharpen AI also includes noise reduction tools so in all but the noisiest of images; you don't even need to invoke Denoise AI. If you also need to uprez the image, time will be saved since you can accomplish this in the same application/plugin rather than having to separately go to Gigapixel AI to complete this task.

The idea of a one stop AI noise reduction and sharpening automated tool is a good one but version 1.0 of Photo AI has a pretty low IQ. Fortunately, if you already own the full Topaz AI suite, Photo AI is free and you can download it by logging into your Topaz Labs account. I am hopeful that this program will

improve dramatically over time. Topaz is definitely not shy in offering updates and improvements to their programs and I hope that machine learning over time will smarten Photo AI significantly.

Here is the final image processed in Photo AI with the areas that did not need sharpening removed via the history brush:

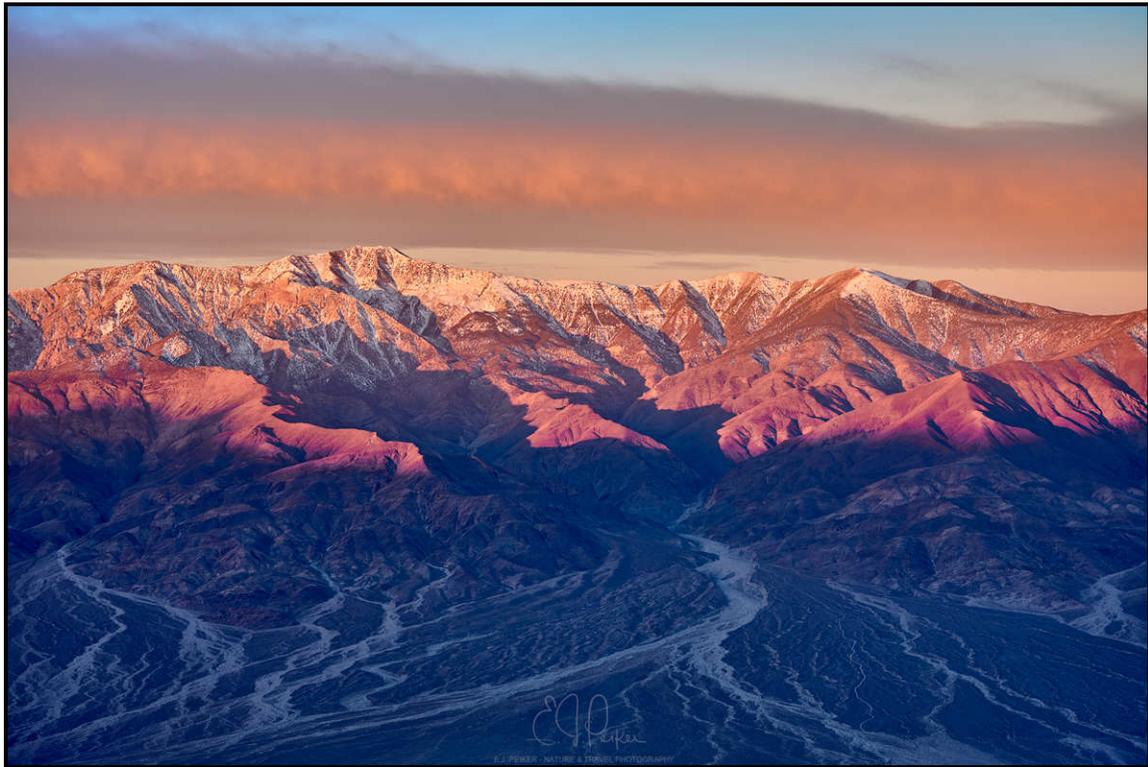


New Providence Island – Bahamas (a7R3, 24-70mm)

### **Going Forward – the personal stuff...**

I launched EJPhoto.com and my Nature Photography business about 22 years ago along with this newsletter. Over the years, I have sold/published thousands of photos, taught many group workshops and even more individual one-on-one workshops, and done dozens of presentations and lectures. I have had my hand on more photo gear than most will ever see – everything from small niche manufacturers to large camera company gear. After 27 years in the semiconductor industry and 22 years in the photo industry (about 9 years overlap between the two) I have been lucky enough to have two interesting, exciting, and challenging careers. Some of my friends would argue that I am currently in my third career – super high-end bicycle building and restoration although I see that as more of an expensive but rewarding hobby, similar to my aircraft flying days of the 1990's and early 2000's but I am starting to get requests for restoration, upgrades and custom builds. Between all of these - semiconductors/computers, airplane flying, photography, bicycles, and numerous other endeavors including sailing and racing cars I am and have been extremely fortunate to participate in and experience so much. I absolutely love photography but I do not like many of the business aspects of it. I have come to the conclusion that I want to purely enjoy photography and no longer want to worry about generating income from it; therefore, I have decided to retire from professional photography which includes marketing photos, as well as leading group and individual workshops. While I still plan on publishing this newsletter and may even still pursue a book idea which I have been sitting on for years, I am removing

the pressure of staying to a rigid schedule on when things get done or the constant pressure of trying to get photos published, murals contracted, etc, etc, etc.... If people ask, I will certainly still help them out, especially my past clients. I am very grateful for their support and loyalty throughout the years. Similarly, I am very thankful for all of those that have read and those that have reached out with feedback about this newsletter over the years. I am not going away, and you will still receive this newsletter, but I am officially becoming a photography hobbyist along with a bicycle building hobbyist, aviation hobbyist, and more...



Dante's View (GFX-50S, 32-64mm)

While I am on personal stuff, I have made several comments in this newsletter over the last two and a half years about the COVID-19 pandemic and its effect on photography, people's health, and the supply chain. For well over 2 years I stayed safe and did not get this disease nor did I do any airline travel. My significant other and I felt we were relatively safe and decided to take a vacation at a beautiful all-inclusive resort in Puerto Morelos, Mexico (south of Cancun) and on the 4<sup>th</sup> day, I started getting a sore throat, my lungs started to fill up and got a severe head cold. I tested positive. The timing would match with the flight to Mexico and I did note that the person sitting in front of me was coughing a lot without a mask and had two kids that were running around the cabin coughing and one of them cried uncontrollably during altitude changes consistent with a sinus condition. Amy and I were literally the only ones on the plane wearing masks but it wasn't enough to protect us. While at the resort, it did seem like quite a few people had what seemed like colds – the new Omicron BA.5 virus was spreading like wildfire. I was very surprised by how hard it hit me. I am in extremely good physical condition cycling over 300 miles a week and doing it at a fast pace. My power output over 20 minutes (called Functional Threshold Power or FTP) is 3.35 Watts/kg which puts me in the top 1% of cyclists over 60 and in the top 2% of cyclists over 50. Despite this, I had much more severe symptoms than predicted which included a mild seizure and COVID pneumonia. Fortunately my four vaccinations (five now as I just got the updated bivalent vaccine) kept me out of a hospital, it was still scary and it took about a month to recover. To this day, three months later, my sense of smell has still not returned.



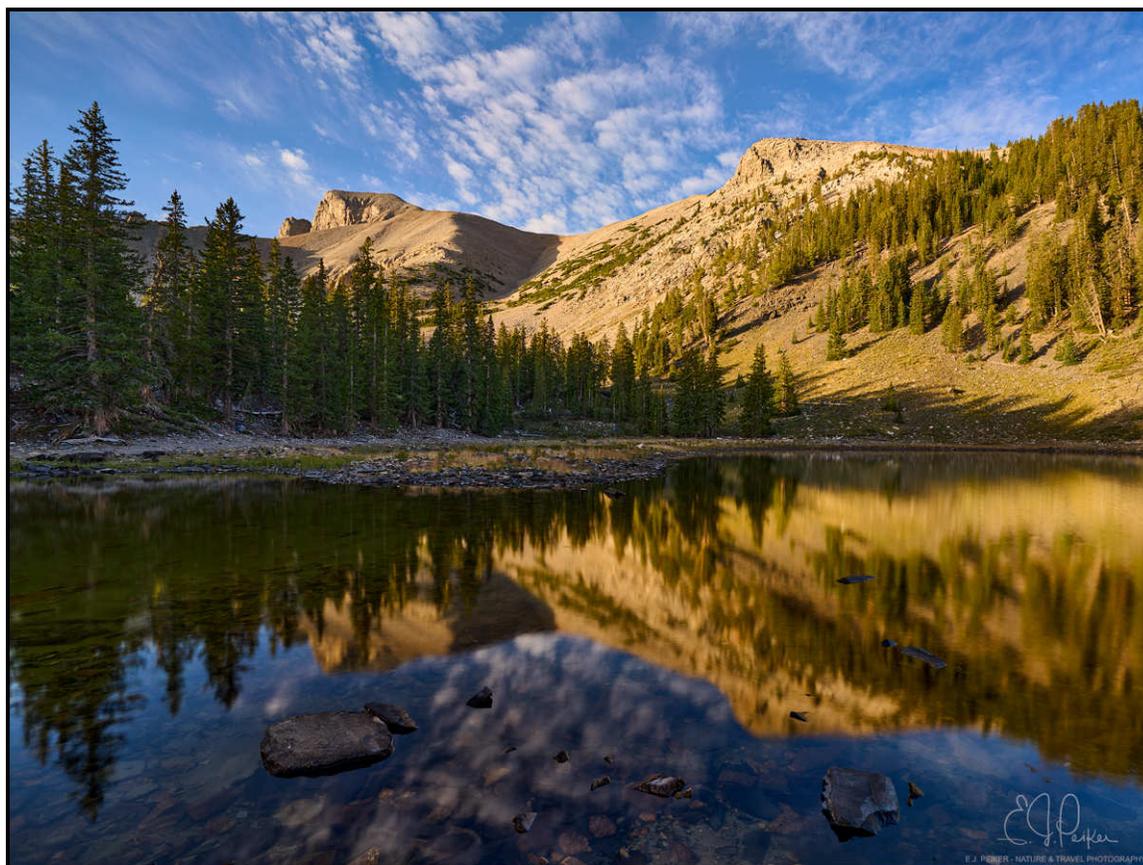
Stairway to Purgatory – Nevada (GFX-100S, 32-64mm)

## The Best Lenses for Your Nikon, Canon and Sony Mirrorless Cameras

The table of best lenses for your camera is a living document that gets updated every quarter. Changes from previous tables can be seen in **bold** but there are no changes this time because none of the new lenses that would likely make this list are actually available. As development of DSLR lenses for Nikon and Canon have essentially stopped, I am switching this section to covering mirrorless only. On all systems, areas left blank means that there is no lens currently available or there isn't one that I can recommend with that native mount; however, in virtually all cases, a DSLR lens can be adapted to the mirrorless system often with some minor to moderate compromises, primarily in autofocus capability. For my final DSLR lens recommendations for Canon and Nikon, please see the Autumn 2020 Newsletter linked here: <https://ejphoto.com/Quack%20PDF/Quack%20Autumn%202020.pdf>

Lens Category	Canon RF Mount	Nikon Z Mount	Sony (F)E Mount
Full-frame Fisheye			Sony 28mm f/2 + 16mm Fisheye Conversion Lens
Hyper Wide Prime			Sony 14mm f/1.8 GM Sigma 14mm f/1.8 Art
Ultra Wide Prime		Nikkor Z 20mm f/1.8S	Zeiss Batis 18mm f/2.8 Voigtländer 15mm f/4.5
Extra Wide Prime		Nikkor Z 24mm f/1.8S	Sony 20mm f/1.8 G Zeiss Loxia 21mm f/2.8
Standard Wide Prime			Sony 24mm f/1.4 GM Sigma 24mm f/1.4 Art
Moderate Wide Prime	Canon RF 35mm Macro IS	Nikkor Z 35mm f/1.8S	Sony 35mm f/1.4 GM Sigma 35mm f/1.2 Art

			Sony-Zeiss 35mm f/1.4
Standard Prime	Canon RF 50mm f/1.2L Canon RF 50mm f/1.8	Nikkor Z 50mm f/1.2S Nikkor Z 50mm f/1.8S	Sony 50mm f/1.2 GM Sony-Zeiss 55mm f/1.8
Portrait Prime (short telephoto)	Canon RF 85mm f/1.2L Canon RF 85mm f/2 Macro IS	Nikkor Z 85mm f/1.8S	Sigma 85mm f/1.4 DG DN Sigma 105mm f/1.4 Art Sony 85mm f/1.4 GM
Medium Telephoto Prime			Sigma 135mm f/1.8 Art Sony 135mm f/1.8 GM Zeiss Batis 135mm f/2.8
200mm Prime			
300mm Prime			
400mm Prime	Canon RF 400mm f/2.8L IS	Nikkor Z 400mm f/2.8 TC VR S	Sony 400mm f/2.8 GM
500mm Prime			
600mm Prime	Canon RF 600mm f/4L IS		Sony 600mm f/4 GM
800mm Prime			
Wide Angle Zoom	Canon RF 15-35mm f/2.8L Canon RF 14-35mm f/4L IS	Nikkor Z 14-24mm f/2.8S Nikkor Z 14-30mm f/4S	Sony 16-35mm f/2.8 GM Sony 12-24mm f/2.8 GM Sigma 14-24 f/2.8 Art Tamron 17-28 f/2.8 Di
Standard Zoom	Canon 28-70mm f/2L Canon 24-80 f/2.8L Canon RF 24-105mm f/4L IS	Nikkor Z 24-70 f/2.8S <b>Nikkor Z 28-75mm f/2.8</b> Nikkor Z 24-70 f/4S	Sigma 24-70 f/2.8 Art Tamron 28-75mm f/2.8 G2 Sony 24-70 f/2.8 GM
Telephoto Zoom	Canon RF 70-200 f/2.8L IS	Nikkor Z 70-200mm f/2.8 VR	Sony 70-200 f/2.8 GM II Tamron 70-180mm f/2.8
Super Telephoto Zoom	Canon RF 100-500mm f/4.5-7.1	Nikon Z 100-400 f/4.5-5.6 VR S	Sony 100-400 f/4.5-5.6 GM Sony 200-600 f/5.6-6.3 G
Macro	Canon RF 100mm f/2.8L Macro IS	Nikkor Z MC 105mm VR S	Sigma 105mm f/2.8 Macro Art Sony 90mm f/2.8 Macro Voigtlander 110mm f/2.5



Great Basin – Nevada (a7R4, 17-28mm)

## Gear Garage Sale Continues

Many filters and camera support items are still available in my ongoing gear sale. All sales are within the USA to USA addresses only. Prices include ground shipping and I am not charging extra to cover PayPal fees – the price you see is what you pay, no hidden fees. Venmo and Zelle are now also accepted and the preferred method of payment. See the full and up to date listing here:

[https://ejphoto.com/gear\\_for\\_sale\\_page.htm](https://ejphoto.com/gear_for_sale_page.htm)

## Social Media

Facebook: <https://www.facebook.com/EJPeikerNaturePhotographer>

## Newsletter Info

This is the 21st year of my quarterly Newsletter. I try to cover the wide array of digital imaging and products from mirrorless to medium format and everything in between. Throughout the years, the information contained herein has always been free and will continue to be free despite the many hours it takes to put it together and significant equipment and travel expenses. Most of the products that I have tested and reviewed, I have purchased myself. A small minority have been made available to me for review and evaluation by loyal readers and a few by the manufacturers themselves.



Grand Canyon (EOS 1D – 24-70mm stitched panorama)

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