



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

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Welcome to the 23rd year of the photography newsletter from E.J. Peiker, Nature & Travel Photographer and www.EJPhoto.com. In this 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>



Northern coast of Spain

In the Field

Living at just 33 degrees north latitude, sunrise and sunset happens very quickly and the golden hour/blue hour time period aren't really hours, more like 15 minutes! This results in the total amount of prime light for landscape photography being reduced to about an hour a day – a half hour in the morning and a half hour in the evening. It isn't really from an hour before sunrise to an hour after sunrise and similar around sunset, or 4 the hours of shootable light that you can get in the 40 and 50 degree latitudes (and even longer when you get into the far northern and far southern latitudes of 60 degrees and beyond). For example in Iceland in the Summer, just a bit below the arctic circle or on the Antarctic Peninsula in the southern summer, blue hour can be from an 11:00PM sunset to a 3:00AM sunrise, the entire time that the sun is just below the horizon. Similarly in winter at those latitudes, golden hour can be for the 10:00AM sunrise to the 3:00PM sunset because the sun just never gets very far above the horizon. That kind of light is magnificent for the grand landscapes that so many of us love to take. But if you live where I do, you either have to find a different type of photography in the many hours between the end of morning golden hour and the beginning of evening golden hour or not shoot at all. In the past I turned to infrared photography during these times but that requires clouds, preferably cumulous clouds to get the best and most dramatic effects in the larger grand landscapes and more often than not, the skies don't cooperate. Of course there are many other types of photography that can be done during daylight hours and more and more I find myself drawn to looking for details and intimate shots of the landscape, often found in shade or where direct sunlight isn't a problem. In this issue, most of the photographs I will share are photos of this type – often these end up being some of my favorite photos from a photo outing or trip. Hopefully you will enjoy them too.



Central California



Pacific Coast

Gear Talk

As I get older, I continually strive to lighten my gear load while maintaining very high standards for capability and image quality from my cameras and lenses. One year ago, in the Spring 2023 newsletter (<https://www.ejphoto.com/Quack%20PDF/Quack%20Spring%202023.pdf>), I covered several kit options and found that the lowest weight and packing volume, while maintaining top-notch image quality, was a combination of the Sony a7R5 with the Tamron 17-28mm f/2.8, Tamron 28-75mm f/2.8, and Tamron 70-180mm f/2.8 lenses. At that time, the Sony f/4 alternatives were a little behind this combination in size, weight, and image quality as they were all lenses from the original launching of full frame mirrorless in 2014. However, in the last year, Sony has really stepped up their f/4 lenses while at the same time making them lighter and more capable. As a result, for 2024 I have revamped my lens lineup. Sony introduced a new 16-35mm f/4, 20-70mm f/4, and 70-200mm f/4 that are as good or better optically as the Tamron trio while being significantly more capable with features missing on the Tamron lenses like focus limit switches, aperture rings, and even image stabilization on the 70-200mm all while extending the range from 17-180mm to 16-200mm. That can even be extended to 400mm on the long end since the Sony 70-200 f/4 can accept the Sony teleconverters. Since the 70-200 can focus to a 1:2 magnification range by itself and a full 1:1 with a 2x converter, it completely negates the need for owning a macro lens. These three lenses combined with the a7R5 camera weigh just 5.2lb compared to 6.4lb for the Tamron trio with the a7R5. Additionally, if I don't feel I'll need focal lengths wider than 20mm, I could eliminate the 16-35mm f/4 lens and drop this down to 4.4lb. A 61 megapixel full frame camera with 20-200mm capability at 4.4lb is just mind boggling. If 20-70mm is enough then the weight drops to an insane 2.75lb.

Surely there has to be something I am giving up by going to this gear set-up! To see how much I am giving up I analyzed my photo library of all images taken since I entered the mirrorless world with the

original Sony a7R in 2014 and the number of times I have taken photographs at f/2.8 that were not astro photos is exactly zero. In fact, only 1% were taken at f/4 with about 95% of all of my shots taken between f/5.6 and f/11. So I am not giving up anything by losing the f/2.8 capability (except for astro which I'll address later) and I'm not really even compromising image quality by shooting wide open since I almost never shoot at f/4. Given this, what is the point in carrying all the extra glass weight required for f/2.8?

For astro photography, my workhorse continues to be the sensational Sony 14mm f/1.8 which is small and light, the Sony 16-35mm f/2.8, and the Tamron 35-150mm f/2-2.8. The camera for this is the Sony a1 as it has slightly better high ISO noise characteristics. These three lenses coupled with the a1 weigh in at about 7.5lb

For macro photography, I simply add a teleconverter to the 70-200 f/4 lens. The beauty of the Sony 70-200 f/4G II lens is that it maintains the same 1:2 magnification range throughout its entire zoom range which lets you do macro photography at longer working distances than the traditional macro lenses for mirrorless that are around 100mm in focal length.

My wildlife kit remains unchanged – the Sony a1 with the 200-600mm lens and a 1.4x teleconverter when needed. I also have the 100-400mm lens available.

After doing the above analysis, here is my 2024 lineup for landscape, astro, macro and wildlife:

Landscape:

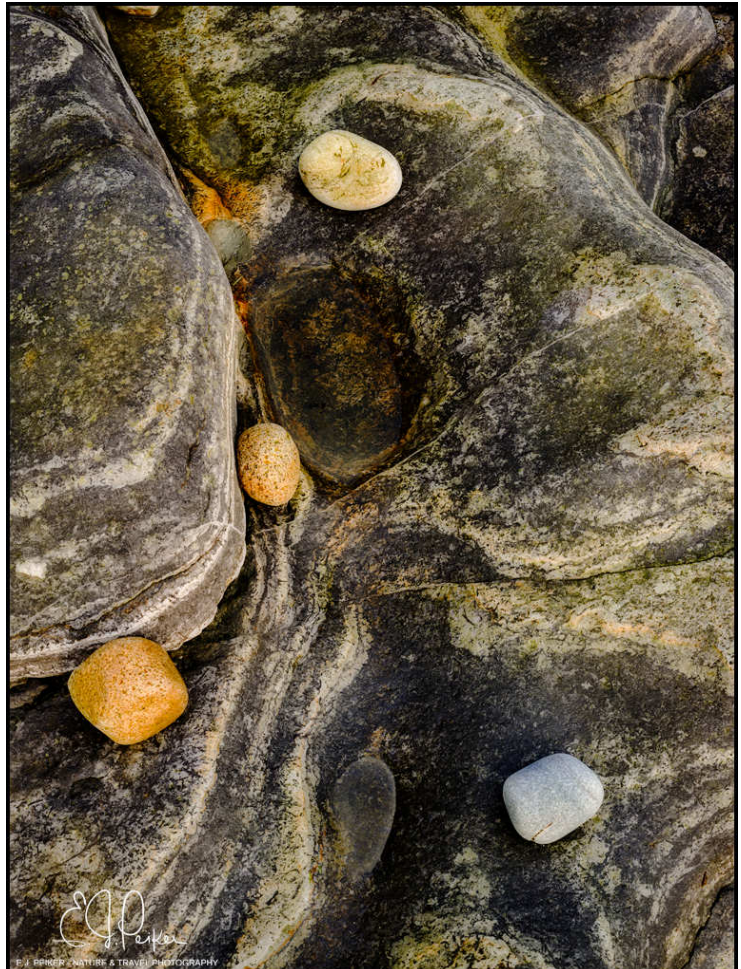
Sony a7R5
Sony FE PZ 16-35mm f/4G
Sony FE 20-70mm f/4G
Sony FE 70-200mm f/4 Macro G OSS II

Astro:

Sony a1
Sony FE 14mm f/1.8GM
Sony FE 16-35mm f/2.8GM
Tamron 35-150mm f/2-2.8 Di III VXD

Macro

Sony a7R5



Scottish Highlands

Sony FE 70-200mm f/4 Macro G OSS II
Sony FE 1.4x

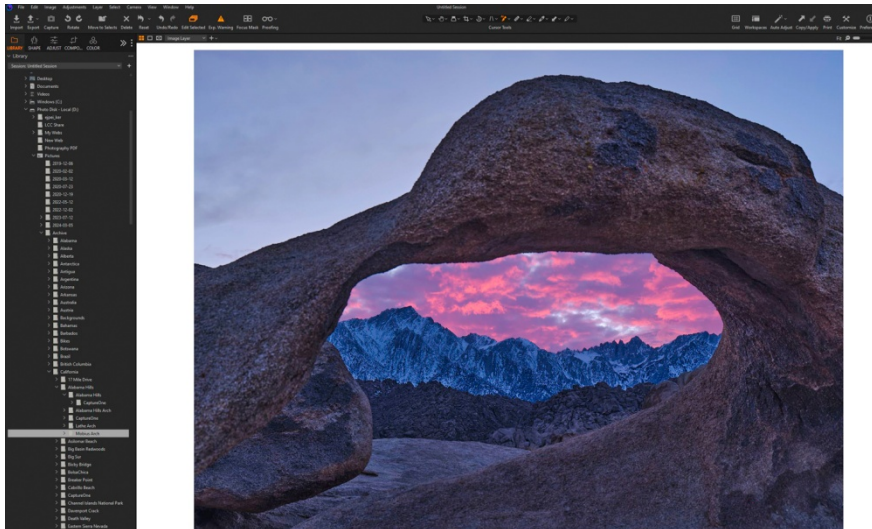
Wildlife

Sony a1
Sony FE 200-600mm f/5.6-6.3G OSS
Sony 100-400 f/4.5-5.6GM OSS
Sony FE 1.4x

Changing the subject... Fuji announced their latest iteration of the X100 recently. The X100VI is a fixed lens rangefinder style camera built around Sony APS-C sensors. While I am not at all interested in a fixed focal length, non-interchangeable lens camera, the sensor technology employed could tell us something about what is coming in a future a7R6 camera from Sony. The X100 line as well as other Fuji X cameras have traditionally used the highest pixel count APS-C sensors that Sony makes and Sony has always followed this up with a full frame version. The X100VI boasts the highest megapixel sensor ever offered in an APS-C camera at 40.2mp. When this is scaled to full frame, you get a pixel count of 90.4 megapixels. This little camera then tells us that Sony has the technology to produce a 90 megapixel a7r6 camera and likely just needs defect levels to be low enough and yield levels to be high enough on this larger chip before an a7R6 could be introduced. My prediction based on this is that sometime in 2025, Sony will have a 90+ megapixel a7R6.

The Story Behind the Photo





Fuji RAF File (Fuji RAW format Capture 1 screen capture)

This quarter's "Story Behind the Photo" is more about what happened when I posted this photo on Facebook than it is about getting the photo to begin with. I took this shot of a very famous arch at the foot of the Eastern Sierra Nevada Mountains in California in December 2018. After spending a few hours in the vicinity of this arch, the sun had set and it looked shooting was over for the day and I started the short hike back to the car when the patch of clouds over Mt. Whitney, the highest point in the 48 contiguous United States, were lit from

underneath by the setting sun. I quickly ran back to the arch and positioned myself so that I could get the lit-up clouds inside the arch. The amount of processing I had to do was minimal due to the exceptional dynamic range of the Fuji Medium format camera that I took the shot with.

When I posted this shot recently, it got the third highest response I ever got for a photo on that platform with over 18,000 likes, wows, and loves. It also got 529 responses. That is great and 95% of the comments were flattering but about 5% of the responses were very negative and accusatory ranging from fake photograph, total AI, can't exist in nature, impossible for the clouds to be fully contained in the arch, and much more. Some were even claiming to be image forensics specialist and sending me all sorts of proof that it wasn't real. I even shared the RAW (see below) file with one of the "experts" and was then accused of faking a RAW file. I have some computer skills, but I have absolutely no idea how I could modify a Fuji RAF file with AI and keep it an RAF file that a RAW converter would recognize. Quite frankly I wouldn't even know where to begin to accomplish this feat. Some of the commentary got quite nasty. Not only was the authenticity of the photo questioned, some people even questioned the story of how I got the photo that I relayed above and others said that this was a fictitious place so it isn't even a possible story. The nasty cesspool that social media has become was on full display.

Trying to explain that quite often the upslope draft from the much moister air coming off of the Pacific Ocean condenses into clouds as the air cools resulting in clouds just over the mountains did not help. One person did chime in and apologized stating that so much of what is online these days is fake and often AI generated that great photos are now just assumed to not be real. Overall this experience has put a bad taste in my mouth about posting on social media and I have dramatically scaled back posting images from daily to once in a great while.

Digital Darkroom

The above experience led me to thinking about whether or not AI is a good thing or a bad thing for photography and I am of two minds on it. The ease of how an image can just be completely made up may be interesting for the digital art market and there are a number of photographers, some famous, that are starting to rely on it more and more producing some stunning digital art. But it is detrimental to traditional photography in that great real photos are no longer assumed to be photos. This goes way beyond sky replacement. I am now seeing "photos" of places that I have been to that don't even resemble those places anymore. A mountain may have been picked and then merged with completely

different scenery, lighting that is not possible for that location, rivers and oceans that aren't there and so forth. One of the most common things that I am seeing a ton of is vertical stretching of mountains to give them a much steeper and more "peaky" appearance while leaving the surrounding areas unstretched and often different than what is actually there – Imagine a mountain like Cerro Torre in Argentina (https://www.ejphoto.com/cerro_torre_fitz_roy_page.htm#Cerro_Torre) being much taller in the background and isolated with a tropical foreground. Again, this can be stunning digital art but it isn't really photography – at least not in the sense of photography from the pre AI era.

On the other hand, the application of AI to image processing has given us capability we did not have before such as exceptional upscaling of images that were taken back when cameras had much lower resolution. Automatic noise reduction or sharpening that can separate the background from the subject at the touch of a button. Sharpening that can rescue a photo where focus was missed by a bit can save a once in a lifetime image that didn't get recorded as well as the photographer would hope. In fact there are a few images that I wish I had not deleted due to lack of sharpness that could be saved by today's AI tools.

Moving on... In the last issue of this newsletter I mentioned that I had purchased a new laptop based on Intel's Core Ultra Processors and integrated ARC graphics. Here is part of what I wrote and then my impressions and testing will follow:

It is the first serious attempt at closing the gap between the very efficient Apple M processors used in the MacBook Pros and highest-end iPads (and recently even in their desktop range of computers) and the power hungry Intel i7/i9 mobile processors. These are based on Intel's 7nm Meteor Lake platform which includes significantly improved integrated graphics, a much more efficient CPU and the first incorporation in Intel processors of a Neural processing unit (NPU) making it much more efficient at AI tasks. On paper it should close the gap to the Apple M processors substantially in performance per watt of electricity consumed and in some regards it may even surpass it but this will need to be thoroughly benchmarked. Battery life for photography and video oriented machines should double or even triple over the current machines which require a discrete GPU such as one of nVidia's GeForce mobile offerings to get acceptable imaging performance. As programs are optimized to utilize the new NPU for AI tasks (think the Topaz AI plug-ins) which relieves the integrated GPU, performance should get some significant improvements. The new internal graphics called ARC have at least double the performance of the very best Intel integrated graphics of the past. While this is still not as good as a high end nVidia discrete GPU, it is likely more than good enough without the expensive, heavy, and power consuming hardware overhead. I hope it can completely replace my heavy Razer 15" laptop with power brick that is huge and weighs almost as much as the laptop itself and its loud and hot exhaust fan that runs at full song anytime the nVidia GPU is in use.



Central California Coast

Since I wrote that I have set-up the MSI Prestige 16 AI Evo laptop computer, gotten comfortable with Windows 11 and have done some real world image processing as well as running some benchmarks. The computer plus tiny USB-C power brick weighs about a pound less than my 2022 Razer 15 inch computer alone and weighs a whopping 3.5 lb less when you add in the hefty Razer power brick plus it sports an absolutely stunning 16 inch OLED display while being physically smaller than the 15" Razer. Battery life for the Razer when utilizing the nVidia 3080 mobile GPU, as one would when working in photo editing programs, is right around 2 hours and the computer is howling at full song with its cooling fans the entire time and still gets hot enough to be uncomfortable on the lap. While the MSI's fan also comes on under heavy graphics load, it is quieter and the computer doesn't get nearly as hot. Battery life under a heavy photo editing load is between 7 and 8 hours and approaches 12 hours for something like text editing, basic internet surfing, or watching a streaming service like Netflix. Under full load, plugged into external power, the Razer draws about 210 Watts of power while the MSI only draws about 85 Watts in my measurements.



Eastern Nevada

As expected, performance under heavy graphics loads is not as good as the nVidia 3080 equipped Razer but is significantly better under non-GPU tasks. If I turn off the Razer's 3080 GPU and utilize the previous generation of Intel graphics called Iris to get battery life into the 3-4 hour range on the Razer, graphics performance is positively awful. This illustrates how much better the new Intel ARC integrated graphics are than the older IRIS integrated graphics. Running some video benchmarks, the ARC graphics are approximately half the speed of the nVidia 3080. A real world test I like to do is run a 10 image focus stack through Helicon Focus, a program that fully utilizes a GPU. A 10 image, 62 megapixel stack took 0.9 seconds on the 3080 and 1.8 seconds on the ARC graphics while taking 7 seconds using IRIS graphics. A batch of 10 RAW 61 megapixel conversions in CaptureOne took 17 seconds on the 3080 equipped Razer and 20 seconds on the MSI and 39 seconds using IRIS graphics. So yes, the integrated ARC GPU on the MSI slows the system a small amount in real world usage but certainly not enough to justify carrying an extra 3.5 lb and then only getting about 2 hours of

battery life. Under Photoshop which does not utilize a lot of GPU capability or multi-threading, the difference is imperceptible. One thing to note is that the Razer has about 1/3 of the screen resolution than the MSI so the MSI is having to render 3 times as many pixels and still does this with very little time lost. This means that if one ordered a lower resolution laptop, the difference would likely disappear altogether.

One question many will ask is how it compares to Apple M2 and M3 computers. I have looked at a lot of benchmarks and have concluded that for graphics loads it is similar to an M2 based computer and for non-graphics loads it approaches an M3. Intel has significantly closed the gap to Apple in lightweight

mobile computing and with the USB-C style charging brick, which is similar in size to those shipped with Apple laptops that huge difference has disappeared, at least with the MSI computer.

Overall I am very happy with my change from a very heavy high performance mobile gaming platform like the 2 year old Razer and replacing it with a much lighter yet still very capable Intel Core Ultra Computer.

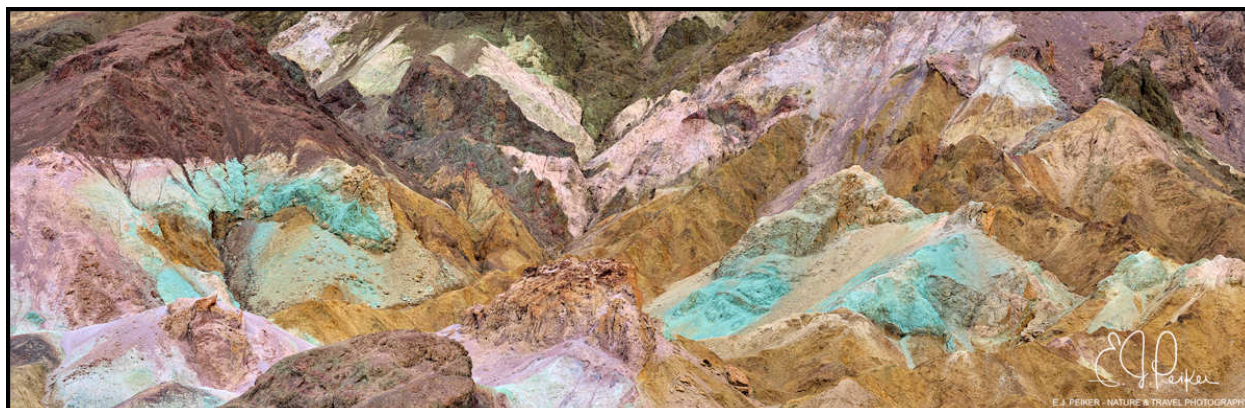
Gear Garage Sale Continues

I have added several new items due to my liquidation of my medium format gear. This includes small items such as Fuji batteries, L-brackets for the GFX-100S and GFX-50S, and more. Additionally, Sony a7R4 support gear is now listed. The headline item now for sale is the fantastic Arca-Swiss Core75 geared leveling tripod head. Many filters and camera support items are still available. 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

Social Media

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Death Valley - California


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