



Top: Shooting wildlife at sunset means low light and high contrast, typically the domain of full-frame cameras. But while I was trying out the Fujifilm X-T3 in the Sacramento Valley last winter, I was blown away with my ability to crop and open up the shadows prior to making a 20x30-inch print from the 26-megapixel file.

Bottom: One of the advantages of full-frame when shooting this scene in the Sierras was the ability to use a tilt/shift lens to control the depth of field. Currently, none of the smaller-sensor systems offer perspective control lenses; lens selection remains a key advantage of full-frame systems.

The scene was very high contrast, so I bracketed for HDR, lessening in this case the dynamic range advantage of full frame.



reasonable ISOs with quality lenses and good technique.

Big Sensor Low-Light Advantage: Do You Need It?

Where things start to separate is when you are shooting in less-than-ideal conditions. Larger sensor cameras are going to beat out the smaller sensors when using higher ISOs to compensate for dim light. While the ISO breaking point of each camera is slightly different, if you mainly shoot in good light, this is a non-issue. Typically, it's the landscape photographer who's most concerned with the ability to make huge prints, but landscape photographers are almost always shooting at base ISO locked down on a tripod, so who cares how the camera does at ISO 6400 compared to other cameras? Worried about the narrower dynamic range of smaller sensors? Again, if you're shooting landscapes on a tripod, you're likely already bracketing for HDR in high-contrast scenes, making this another non-issue.

For me, it's when I'm shooting wildlife, sports or assignments where I have to produce quality images no matter how bad the light that I appreciate the edge full frame gives me.

At this point, the smaller formats have replaced my full-frame system for some of the projects I shoot and for nearly all of my personal work. When I do a backpacking trip or ski tour, I always end up choosing

Top: This image is from the very last time I carried a heavy full-frame kit on a long backcountry adventure. My camera system without the tripod weighed close to 10 pounds.

Lately, I have been carrying the smaller Sony a6500 with the 10-18mm F4 OSS and Vario-Tessar T* E 16-70mm F4 ZA OSS lenses and have cut the weight in half.

Bottom: This image from Tuolumne Meadows was taken at sunset with the Olympus OM-D E-M1 that I owned and used extensively for a while as my backcountry setup. While I ended up upsizing to an APS-C system for better low-light results, when stopped down and bracketed for HDR on a tripod, the Micro Four Thirds sensor held up great in large prints.



an APS-C-sized sensor over my heavier full-frame Nikon D850 (though the new Z series brings down the weight of full frame closer to APS-C cameras). I first started off using the Olympus Micro Four Thirds system, which I loved in terms of size and features, but I eventually upgraded to an APS-C system because the image quality at higher ISOs wasn't where I needed it to be for the work I do. (To be fair, this was two generations ago in the Olympus world, so things have improved.) I really wanted to love the Olympus system because it's so small and portable, but I just found I needed a bit more ISO ability for shooting action in low light. That being said, I have one friend who's a full-time photo guide who has completely stopped using his pro Canon gear and says photography has "never been so much fun" now that he's using the Olympus system. There's really something to be said for how good and small the lenses are in the Olympus system, especially for a wildlife photographer who can now handhold a 600mm f/4-equivalent lens no problem.

For my needs, I've found the APS-C systems to be the sweet spot in terms of image quality versus weight and cost savings. I've been shooting the Sony a6500 alongside the Fujifilm X-T3 in an effort to figure out which system is right for me. While the Sony is a bit smaller and has a better buffer, the Fujifilm has far better lens offerings. The Fujifilm is also newer and thus has a better viewfinder, but the big buffer of the Sony





This sunset image was taken during one of my Alaskan Eagle workshops. While not of an eagle, I was testing the dynamic range of Olympus OM-D E-M1 Mark II. I found it to be quite impressive from such a small sensor. The image might have been a little sharper if I had shot it with my 45-megapixel D850, but that being said, it still looks great, and I have sold several prints of this image in sizes up to 20x30 inches and been more than happy.



tems, both Olympus and Panasonic are offering solid lens collections. In APS-C, Fujifilm is really the only company offering a full range of professional-level lenses to meet nearly every need. Yes, Sony, as well as Canon and Nikon, offer great APS-C sensor cameras, but none of them has a selection of lenses to match their full-frame lens lines, especially the fast primes. Depending on your style of work, the lack of specific lenses in a system could be a deal breaker.

No matter what you decide, today is a new world in terms of cameras. There's no question that mirrorless is the future and likely most of us will be shooting exclusively mirrorless cameras within the next few years. But choosing a sensor size to bring you into that new world is a tougher decision. For me, as a working professional, I'll continue to pay more and carry extra weight in exchange for any edge my camera system can give me, but I can say that after spending a couple of months shooting the Nikon Z mirrorless cameras this spring, I'm 100 percent convinced I've bought my last full-frame DSLR.

When choosing your next camera, ask yourself these questions: Are you willing to pay the costs to have the absolute best image quality on the market, or have we reached a point where your image quality needs are met and it's more about ease of use and making photography fun? Is that full-frame or even medium-format camera really worth the extra hassle of lugging it into the field, or will something smaller do the trick? In the end, we all know the best camera is the one you're willing to carry to the most locations. **OP**

See more of Josh Miller's work at joshmillerphotography.com.

is a plus for some of what I shoot. I use the Sony a6500 in a waterproof Salty Surf Housing for assignment work shooting rafting. I've made prints from both cameras up to 20x30 inches and have been blown away with their quality when shot at low ISO and good glass. While your mileage may vary and everyone's quality threshold is different, coming from the days of 35mm slide film and early digital cameras, everything today is a major step up.

In fact, I'd argue that for most photographers today, the gains by moving up to full frame aren't worth the extra cost and weight. I'd even go so far as to say unless you're pixel peeping on the computer, you might not even be able to tell the differences in the files when printing unless you're making huge prints. I have no worries about sending files from any of these formats

to editors, and I know two full-time adventure photographers who, in order to save weight, are just using the Sony a6500 and sometimes even the latest Sony RX100 fixed-lens camera—with its relatively small 1-inch sensor—for their work, which is published worldwide.

The Best Camera For You

So how do you decide? With all the sensor formats being so good, I wouldn't actually make sensor size my No. 1 determining factor when choosing to invest in a system. I'd decide how good is good enough in terms of image quality and then look more broadly at the lenses and accessories being offered with the system. Do you do a lot of TTL flash work? Do you need a long telephoto lens for wildlife? In their Micro Four Thirds sys-

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