



Although this winter was pretty mild where we live, we still can't wait for the snow to disappear and spring to arrive. Even though it will be a while before the spring colours and sounds will replace the monochrome and quietness of the winter landscape, we know it will be here soon. To pass the time until then, here are a few items you may want to consider checking out.

## Nikon AF-S NIKKOR 200-500mm f/5.6E ED VR lens



**We** were quite surprised, for a couple of reasons, when Nikon announced its new AF-S NIKKOR 200-500mm f/5.6E ED VR back in late summer of 2015. The first reason was because Nikon already produces two well-respected super telephoto zoom lenses that have somewhat similar focal lengths: the AF-S NIKKOR 80-400mm f/4.5-5.6G ED VR and the AF-S NIKKOR 200-400mm f/4G ED VR II. The second reason, and biggest surprise, was its price, especially when compared to the Nikon 80-400mm f/4.5-5.6G ED VR (\$3,149.95) and the Nikon 200-400mm f/4G ED VR II (\$8,199.95). The new 200-500mm f/5.6E ED VR appears to be a real bargain at \$1,649.95. However, it's only a great deal if it performs really well, which it does.

The Nikon AF-S NIKKOR 200-500mm f/5.6E ED VR is an FX lens, which means that it's designed for use with full-frame, or FX, sized sensor digital cameras. It can also be used with APS-C or DX (1.5X crop sensor)

cameras as well, giving it a full-frame equivalent focal length of 300-750mm, making it great for wildlife and sports photography.

Its build quality is very good, but not quite as rugged as the pricier 200-400mm f/4.0G ED VR II and 80-400mm f/4.5-5.6G ED VR lenses. Both the lenses are weather sealed, whereas the new 200-500mm f/5.6E ED VR is not. During our tests we used it unprotected in a lot of less-than-ideal conditions, including light rain and blizzard conditions with driving snow and -15 C temperatures, and it performed flawlessly. We feel it should hold up very well to the rigours that most outdoors photographers will put it through.

The 200-500mm f/5.6E ED VR is shorter, has a smaller diameter, and is significantly lighter than the 200-400mm f/4.0G ED VR II. However, it's longer, has a larger diameter, and is heavier than the 80-400mm f/4.5-5.6G ED VR. Make no mistake about this lens; at 2,300 g (5 lb) it's a fairly heavy lens, and be-

cause of its size (267.5 x 106 mm) you'll need a large camera bag. But even with its bigger size, we did find it fairly comfortable to hold and operate. It has a built-in vibration reduction (VR) system, which Nikon claims to enable shooting handheld at shutter speeds up to about 4.5 stops slower than what would be otherwise possible. The VR system is indeed impressive and will definitely allow you to get sharper handheld images while using shutter speeds slower than you'd be able to do without the VR function. If you want to get the sharpest possible images that this new lens is capable of producing then you'll want to use a tripod. To make this easier, the lens has a dedicated rotating tripod collar that keeps the camera and lens centred over the tripod to reduce vibration and makes switching from horizontal to vertical composition much more convenient and quick.

The auto focus is relatively fast, quiet and accurate, snapping to focus quickly thanks

to the built-in Silent Wave Motor (SWM). In addition, the auto focus can be manually overridden so you can fine-tune your focus to get the perfect result. The focus ring is large enough to make manual focusing easy. The internal focusing system allows the lens to focus without changing its length and the front of the lens doesn't rotate when focusing or zooming. It has a respectable minimum focusing distance of 2.2 m.

When zooming, the lens' length changes; at the minimum focal length of 200mm the lens is about 267.5 mm (10.5") long, but at 500mm it extends out to about 340 mm (13.4"). To fully zoom the lens you need to turn the zoom ring almost a half turn. Luckily both the zoom and focus rings rotate smoothly. The large zoom ring is positioned in front of the focus ring, which is opposite to most zoom lenses that we're familiar with. This does have some impact on the handling of the lens while handholding it since you have to stretch your fingers forward to turn the zoom ring while trying to keep the camera and lens properly balanced.

Optically, the Nikon AF-S NIKKOR 200-500mm f/5.6E ED VR lens has 19 elements in 12 groups with three extra-low dispersion (ED) glass elements. It has Nikon's Super Integrated Coating, however, it's lacking the Nano Crystal Coating that's found on many of the Nikon's higher quality lenses. Overall, the image quality is very good to excellent,

both on full-frame sensor cameras and APS-C sensor cameras. It's very sharp through most of its entire focal length range, being ever so slightly softer at the 500mm end. It's also very sharp wide open ( $f/5.6$ ) and gets slightly better at  $f/8$ . By  $f/16$  we began to see a little diffraction starting to affect the sharpness, but even stopped down completely it still had very good sharpness. The lens handles chromatic aberration well and has great colour rendition, good contrast and essentially no distortion.

In our opinion, the Nikon AF-S NIKKOR 200-500mm f/5.6E ED VR lens is a wonderful super telephoto zoom lens. Its image quality and sharpness is very good to excellent throughout its entire focal length range, and it performs really well wide open. This lens isn't perfect as it has a small handling issue when handheld. It's large and heavy, and may not be as rugged and durable as some of Nikon's other more expensive super telephoto zoom lenses, but should hold up very well to the rigours that most photographers will put it through. When you factor in its price tag of \$1,649.95, it's one of the best deals that we've seen in quite a while. We have no reservations about highly recommending this lens.

[www.nikon.ca](http://www.nikon.ca)

**Photo:** Polar bear mom and cub

**Gear/Settings:** Nikon D7100, Nikon AF-S NIKKOR 200-500mm f/5.6E ED VR lens,  $f/8.0@1/200$  sec., ISO 400, focal length 420mm (630mm full-frame equivalent), handheld



# Tough as nails. Light as a feather.



**The Shootout** represents Tenba's ultimate no-compromise backpack. With features such as quick access side-door, pivot-fit harness straps, tripod carrier, padded sleeve, and a body armor base panel, the Shootout is clearly a backpack built to tame the wilderness. Available in two sizes: 24L and 32L.

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## Macphun Aurora HDR Pro Software

In late 2015 Macphun Software, working with well-known photographer Trey Ratcliff ([www.stuckincustoms.com](http://www.stuckincustoms.com)), released their newest application, Aurora HDR ([aurorahdr.com](http://aurorahdr.com)). As you can probably tell from its name, Aurora HDR is a software program that allows photographers to produce High Dynamic Range (HDR) images.

Although Macphun software programs, including Aurora HDR, are designed for Mac computers, they're currently developing a Windows version that should be available later this year. There are two versions, Aurora HDR (\$45.99) and Aurora HDR Pro (\$137.00). The Pro version has more features, more presets and multiple licenses for use on up to five Macs. Check their website to see a complete list of the differences. We received a pre-release copy of Aurora HDR Pro to review, and of the two it's the version that we would recommend for photographers.

Aurora HDR Pro has been designed to work as a stand-alone application or as a plug-in with Adobe Photoshop (PS), Adobe Lightroom (LR) and Apple Aperture. We tested the software as a stand-alone program and in PS and LR. With the software you can process either a single image or a multi-photo bracketed set of images into an HDR image; and it supports a variety of file formats, including a number of RAW formats.

There are already a number of very good HDR processing programs available, so what makes Aurora HDR different from the others? To start with, Aurora HDR is unique in that you can create layers within the HDR image. With layers you can apply adjustments specifically to certain areas of the scene by masking those areas on a layer with the use of a brush tool without affecting underlying areas. You can also make opacity adjustments and blend mode changes for each layer. For those who work with Photoshop, you'll be familiar with the concept of layers and the advantage layers give you in your workflow.

Aurora HDR Pro has more tools than any of the other HDR programs we've used, allowing for vast control over your HDR image processing. Some of these features include precise colour controls and colour toning, luminosity masking and an HDR Denoise tool used to reduce the noise and artifacts that



“Aurora HDR Pro has more tools than any of the other HDR programs we've used, allowing for vast control over your HDR image processing.

the process of merging the images can produce. The ghost reduction feature produced very good results when dealing with moving elements in multiple image sets. Aurora HDR Pro also gives you an array of finishing touches such as adding a vignette.

The interface is set up with the navigation tool bar across the top edge, with the layers and adjustment tools along the right side. Presets can be displayed across the bottom edge for easy access. Aurora HDR Pro comes with a number of presets, some of which are fairly realistic, or you can easily create your own with your favourite settings. The opacity of each preset can even be adjusted, further lowering the intensity of the adjustments made. As we started using the software we found it very helpful to pick the preset that was close to the result that

we wanted and then modify the preset's settings to produce our final HDR image.

One of the cool features we like in Aurora HDR Pro is that once you've created your HDR image you can save it as a "Macphun HDR Image" (.mpau). This allows you the ability to revisit that HDR image at a later date and continue to make adjustments in Aurora HDR Pro as all of the settings are saved. Processed images can also be saved as a TIFF, PSD or a variety of other file formats.

Since its introduction in late 2015 until when we wrote this review in late January Macphun had already released two updates to address issues and improve functionality. Listening to their customers, addressing the issues and providing regular updates shows that Macphun is serious about producing the best HDR software possible.

In our opinion, Aurora HDR Pro is the best HDR program that we've used to date. Its interface is more intuitive, with better controls than other HDR software, and we were able to produce very realistic HDR images. Aurora has too many good features to mention them all. If you're looking for one of the best ways to produce realistic HDR images, or if you like things funky, then you should consider trying Aurora HDR (there's a free trial). We give it two thumbs up – each.

MYTH:  
Mirrorless camera systems  
don't have enough lenses.



Image shot with the Olympus OM-D E-M1 and an M.Zuiko ED 8mm f1.8 Fisheye PRO Lens  
by Olympus Visionary John Sterling Ruth.

**MIRRORLESS TRUTH:** With 20 choices, there's  
an M.Zuiko lens for any shooting situation.



Lenses are critical to any photographer's creative arsenal. That's why the Olympus OM-D system offers a versatile and ever-expanding selection of Zuiko lenses, including the highly acclaimed PRO Series. Every Zuiko lens is meticulously engineered—crafted from precision-cut glass and painstakingly made to deliver extraordinary resolving power. So get as creative as you want and take on any shooting situation. We have a lens that gets the job done.

**Get Power. Get Portable. Get Olympus.**

**OM-D** ZUIKO  
LENS SYSTEMS

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## Review Update – ClearWhite White Balance System

**Way** back in Issue #7 (Fall/Winter 2008), OPC contributing editor Darwin Wiggett did a review on the ClearWhite white balance system ([www.DigitalPhotographyKits.com](http://www.DigitalPhotographyKits.com)). Fast-forward to the end of 2015 and we received a sample of an improved version of the ClearWhite white balance system to try out. Since Darwin's review was extremely positive, we were really interested in trying out the system ourselves.

The ClearWhite white balance system consists of a ClearWhite white balance filter, a ClearWhite neutral grey card and a detailed instruction booklet that clearly explains how to use the system in a variety of different situations. In addition, there's a lanyard and a nice carrying case for the filter. There are two sizes: the standard size (100mm x 100mm/4"x4" for \$59.99 US) that's suitable for use with lenses



that have a front diameter of up to 95mm and the large size (126mm x 126mm/5"x5" for \$69.99 USD) for really large lenses.

The ClearWhite white balance system gives photographers a quick and easy method to create custom white balance (WB) settings so they get consistent and accurate colours in-camera and minimizes or eliminates post-

processing WB and colour corrections. Essentially all that a photographer needs to do is hold the ClearWhite white balance filter in front of the lens and make a custom WB setting. The hardest part of the process is figuring out how to set your camera's custom WB.

Since we didn't do the original review, or have the sample that was used,

we can't do a comparison to the new version to say how much it has been improved. However, we can say that the ClearWhite white balance system is one of the best custom white balance tools we've used. It's simple and quick to use, is easily carried with you and, most importantly, produces accurate and consistent results.

## MindShift Gear BackLight 26L Photo Daypack

**MindShift** Gear recently released a new photo daypack, the BackLight 26L. We would consider it to be a small to mid-sized photo backpack or a daypack (29 cm W x 51 cm H x 20 cm D) since it's a bit smaller than many photo backpacks, but it still has plenty of room for an all-day photography excursion. The padded camera compartment is designed to carry a standard DSLR camera body (without an attached battery grip), four to six lenses, a flash and other accessories, or one or two mirrorless cameras, five to seven lenses, a flash and other accessories. The closed-cell foam dividers that are included allow for a considerable amount of customization of the camera compartment. There are also two zippered internal mesh pockets for storing a variety of accessories.

Access to the camera compartment is through the zippered back panel. This is a feature we really like as it helps keep the back of the pack and the shoulder straps clean and dry when the pack is put down on the ground to access your camera gear. Since the BackLight 26L is a smaller daypack, it has been designed so that you can actually access your camera gear without taking off the pack. Simply loosen the waist belt a little, slide the shoulder straps off and then swing

the pack around in front of you. There's an adjustable neck strap that helps keep the open back access panel against your chest, providing hands-free access to your camera gear – a nice little feature.

There are two zippered front stuff pockets that provide an additional nine litres of storage space for carrying a variety of items like a rain jacket, gloves, headlamp, snacks and other miscellaneous items. In the larger of these pockets there are separate dedicated compartments for a 10" tablet and a 15" laptop. On each side of the backpack is a large water bottle pocket with a cinch cord. Also on the front is a daisy chain, ice axe loops and side compression straps for additional lash points for attaching gear on the outside of the pack.

A tripod or monopod can be carried either on the front or the side of the daypack using the included tripod mounting systems. It comes with a removable seamless waterproof rain cover that protects the backpack from the elements, and it can also be used as a ground cloth.

Although the BackLight 26L is a mid-sized photo daypack, it still has to carry a considerable amount of gear, so it needs to have a harness system that's adjustable

and rugged to fit comfortably, distribute the weight properly and handle the weight of the gear. The good news is the BackLight 26L delivers on all accounts. The shoulder straps and waist belts are nicely padded and adjustable, and there's a sternum strap to help keep the pack from shifting. In addition, there are padded back panels with an air channel for increased comfort and support. With the backpack fully loaded, even with our different body sizes, we both were able to get it properly adjusted for a comfortable fit for hours of hiking and photography.



Say 'hi' to high speed sync photography.

The MindShift Gear BackLight 26L (\$249.99 US) is really well made, using high-quality materials and zippers, and should provide most outdoor photographers with many years of dependable use. The comfortable and adjustable harness system makes carrying your camera gear a lot easier, even after a long day of hiking. Available in two colours, charcoal or greenfield, the BackLight 26 photo daypack is definitely worth checking out if you're looking for a new camera daypack.

[www.mindshiftgear.com](http://www.mindshiftgear.com)



## Review Update - Progrey Filters

In Issue #35 (Fall 2015) we reviewed the Progrey G-100X Filter System and a number of their filters. Since our review was published the folks at Progrey ([www.progreyusa.com](http://www.progreyusa.com)) have been busy.

In our review we noted that the Progrey 10-stop (ND1000X) Genesis Truecolor square glass solid neutral density (ND) "had a slight magenta colour cast," however, their 7-stop (ND128X) filter had "no detectable colour cast." For us, this slight magenta colour cast was not a big deal as it was easily removed in post processing and was less than what we've seen in some of the competitor's 10-stop solid ND filters. A couple of months ago we received a sample of their improved Genesis Truecolor 10-stop (ND1000X) ND filter to test out. In comparison to the original filter, the new one had essentially no colour cast. We were really impressed, both with the filter itself (it's the best 10-stop solid ND filter that we've used), and Progrey's commitment to improving their filters based on the feedback they received, with the goal of producing the best filters possible.

We also received a sample of Progrey's newest line of graduated neutral density (GND) filters, the TITAN series. Since we were really impressed with the quality of their original series of GND filters, we were surprised to see them come out with this new, upgraded series. According to Progrey, the new TITAN series filters are made with the highest quality, ultra-clear, specially modified CR-39 resin, making the filters practically unbreak-

able with essentially no colour cast. In addition, the TITAN filters have 10 ultra-thin protective coating layers on each side, including anti-reflection, anti-scratch and dust/smudge resistant coatings.

We compared an original series 2-stop (0.6) hard edge GND filter to the equivalent new TITAN GND filter and in terms of image quality and colour cast, we couldn't detect any difference between the two; they were both excellent. The new filters are more pliable and flex more so they're less prone to shattering. Although we didn't test the breaking strength of the filters ourselves, we did watch the short video on Progrey's website and were quite impressed ([www.progreyusa.com/Titan-GND.MOV](http://www.progreyusa.com/Titan-GND.MOV)).

Currently the new TITAN series is only available in the 100mm wide (G-100X) size and a variety of densities with both hard and soft edges. They're a little more expensive than the original series (\$115 US vs. \$77 US, respectively). In our opinion, photographers can't go wrong with either the original or the new TITAN series of GND filters, but if you're really hard on your filters then you may want to consider the new TITAN series. 

*The Degners operate Wilderness Light Photography in Sherwood Park, AB. Together, they spend as much time as they can in the field capturing the beauty, drama and diversity of the natural world around them. They've done numerous workshops and seminars in western Canada.*

[www.opcmagazine.com](http://www.opcmagazine.com)



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