

# Darkroom

M A G A Z I N E



**IN THE  
ZONE**

ANSEL ADAMS  
EXPOSURE  
SECRETS

Canon 70Dvs  
Nikon D5300

**FEATURE  
INTERVIEW**

iStock Photo Founder  
**BRUCE LIVINGSTONE**

FILTER  
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# EDITOR'S FOREWORD

**W**elcome to Volume VI of DarkroomPro Magazine. There's tons of great material packed inside this issue — the first to be released for the iPhone as well as iPad!

As you know, we continue to offer this publication free of charge, and while we hope its contents prove entertaining and informative to our readers, we could really use your support to ensure its continued success. How can you help? It's as easy as tapping the buttons below and Liking us on Facebook, and Following us on Twitter.

This way we are able to attract more advertisers which help pay the considerable costs involved in bringing this magazine to you at no charge. It's a simple thing to do, and we'd really appreciate it! We will never spam you, and you'll discover the content we provide via these social networks is well worth the tap.

So without further adieu, on with the show!

This time around, we feature the stunning digital artistry of Erik Johansson, articles on building a studio on a shoe-string budget, landscape photography 101, the Zone System, gear and software reviews, filter fundamentals, and a fascinating interview with serial entrepreneur and iStockPhoto founder, Bruce Livingstone.

Enjoy!

Ray Richards,  
Editor

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W



A thin line separates great photos  
from award winners...

...that line is red



**L**  
EF LENS  
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A bright red line emblazoned on the lens barrel, the luxury of the letter "L"...

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## NIKON D4s

Nikon recently announced their new flagship professional DSLR body, the D4s. Building on the successes of the D4, the D4s incorporates a wider ISO range (50-409,600), faster frame rate (11fps), improved battery life (up to 3020 shots), and enhanced auto-focus options. Incorporating a new sensor utilizing Expeed 4, this body also boasts improved video resolution (1080/60p at 42 or 24 Mbps), and dramatically improved networking capability via gigabit ethernet.

So if you already own a D4, should you run out and purchase a D4s? Well that depends. If your work demands are addressed by the new features yet you were left feeling unsatisfied with the performance characteristics of the former body, and you have the budget, then yes, by all means. However, this update is more evolutionary than revolutionary (unlike the D3 to the D3s for example); and in fact, despite the increases in ISO range, DxOMark's exhaustive tests have



revealed little difference in ISO performance — indeed still falling slightly short of the D3s. On the other hand, dynamic range has improved 1/2 stop, and we feel that is more important than improving the already great ISO performance of the D4. If you don't already own its predecessor, the choice is clear. This is indeed an amazing camera body; and you can't go wrong picking up the D4s. Retail \$6500 USD (body only).



Focus Shifter by Photojojo

## HOLLYWOOD FILTERS

Tiffen has announced they are now providing their world-renowned diffusion effects filters, previously only available to the professional cinematography market, to photographers everywhere! Their Pearlescent, Satin, and Black Satin models are now available in 40.5, 43, 46, 49, 52, 55, 58, 62, 72, 77 and 82mm ring sizes. The Pearlescent is used to mute colours, and soften excess sharpness and contrast, providing a subtle image quality and slight halo around highlights. The Satin and Black Satin filters on the other hand are used to slightly remove contrast and smooth out unwanted blemishes and wrinkles... the difference being the Black version additionally renders a warmer, grainier feel; while the Satin yields a cleaner look. Pricing as yet unavailable.



Without Pearlescent

With Pearlescent

## CINEMAGRAPH PRO

For a limited time Flixel Photos is offering their Cinemagraph Pro software for Mac at 92.5% off... only \$14.95 on the App Store! This amazing software allows you to easily create a cinemagraph (image in where there is limited movement (think paintings in Harry Potter), commonly referred to as

a 'living photograph') by importing video files, selecting the area you want to animate via masking tools while leaving the rest of the image static, and trimming the loop for a seamless result. What used to take hours in Photoshop has now been reduced to a few simple clicks. You even get access to 30 built-in filters. Quite a bargain for \$14.95!

## FOCUS SHIFTER

Here we have yet another cool gadget from Photojojo: the Focus Shifter. This handy rig provides the user the ability to remove the usual jerky mid-scene focus adjustments, normally present in DSLR video projects.

A simple lever mechanism which fits any lens provides for smooth transitions between user-defined points you simply mark on the dry erase surface with a suitable marker (included). What a great yet simple idea! Retail at \$49 from photojojo.com

# FRESH FACES

*Erik Johansson*



**Erik Johansson**  
www.erikjohanssonphoto.com

Born in 1985, Swedish photographer and digital artist Erik Johansson has always been fascinated by art, first inspired by his grandmother, a painter. His lifelong passion for

# Fresh Faces

# Erik Johansson



drawing came to prove key in developing his unique style as evidenced in the images shown here. At the age of 15, Erik acquired his first digital camera which, in his words,



“opened up a new world”. His interest in computers and sketching, when combined with this new tool, led to his initial forays into the realm of digital art. Moving to

# Fresh Faces

# Erik Johansson



Gothenburg in 2005, Erik undertook the study of Computer Engineering, graduating with a Masters degree in Interaction Design. During this period, Erik posted some of

his early creations on the Internet, and soon thereafter began receiving requests for commissioned work from advertising agencies. Encouraged by this initial success, Mr.

# Fresh Faces

# Erik Johansson



Johansson eventually relocated to Berlin, and forges his unique blend of photography and digital wizardry for commercial clients full-time. A featured speaker at TED and

Adobe MAX, Erik has also worked with Google and Microsoft, and continues to delight and inspire photographers and artists alike from around the world with his work.

# Fresh Faces

# Erik Johansson



Inspired by the landscape and architecture of his native Sweden, Erick also draws upon his love of surrealist masters such as Salvador Dali, and Dutch graphic artist M.C.

Escher. Despite, no formal training in photography, Erik Johansson is in high demand professionally, giving hope and inspiration to the rest of us! Keep up the great work Erick!

*Fresh Faces*

*Erik Johansson*



# Digital Darkroom



While, as you may recall, in our last issue we explored Perfect B&W as a stand alone product, we were thrilled to hear onOne Software had just updated its popular Perfect Photo Suite to version 8, and kindly provided us with a copy to evaluate. So let's dive right in!

## WHAT'S INCLUDED?

Eight discrete yet connected modules comprise the suite, and follow a logical progression from the Browser, to Layers, Portrait, Effects, B&W, Mask, and Resize. Let's explore each in turn and see what you get!

## BROWSER

The 'Browse' module enables the user to view a grid of images, or single photo, selected from a variety of sources, including local, near-line, and popular online services such as Dropbox and iCloud. It works pretty much as you'd expect it would, with sorting by name and date, as well as

supporting rudimentary search. We were disappointed that, while this module does indeed display EXIF info, we weren't able to search on that metadata within the images themselves. The inclusion of a GPS button in the 'Info' panel which spawns Google Maps in a browser for files which include this data is a nice touch however; and the filename search was fast and accurate.

Where the Browser begins to exhibit its true strength is in its powerful batch processing capabilities. This facility enables you to take a selection of photos through any, or indeed all of the other modules, and automatically apply either user generated, or the included presets on each. Further, this functionality includes an extremely flexible watermarking tool which allows you to set the size, inset, position, and opacity of your mark, and blast through the process in a batch. What's more, you can save your frequently used batch processes to a user preset, and invoke them at any

time with a single click. Very handy indeed!

Does it approach Lightroom or Aperture's catalogue management prowess? Nope — not even close. Hey, Perfect Photo is offered as a plugin to each for good reason. Is it a fast and capable image browser with excellent batch processing capabilities, and a viable springboard to the other modules in the suite? Definitely.

One note however: as indicated in our previous article on Perfect B&W, the Suite does require some decent computational horsepower to run smoothly — so don't expect it to whiz through processing tasks on your ancient Macbook. There are options in the preferences that address this however; simply move the sliders toward the 50% mark for memory and VRAM consumption should your computer be lacking in either of these areas, and you'll notice performance improvements.

## LAYERS

Next up, the Layers module enables the user to delve into layer based photograph-

ic workflow — providing facility for the creation of composites, correcting exposure balance, including backgrounds and borders, overlaying textures, and more... all without the need for Photoshop.

Not only does this module include all the basic tools you need to edit your layers: transform, crop, clone stamp, masking implements and the like, it also features tons of cool extras in terms of backdrops, skies, weather, gradients and more, which enable you to add extra punch to your composites. Further, Layers supports all the blending modes you'd find in Photoshop, as well as opacity controls for each layer. If you're unfamiliar with layer based image editing, you'll quickly be surprised at the amazing results you can achieve through its implementation.

Is it a replacement for Photoshop? No... but for the most common layer oriented operations, it's damn good — and the extras are worth checking out for even the most ardent Photoshop enthusiast. It's also considerably easier to learn, and a tiny fraction of the price.



## ENHANCE

The Enhance module is similar to a number of functions to be found within Lightroom's Develop module and includes controls for adjusting tone, vibrance, contrast, colour temperature, sharpening, exposure, and the like. However where it differs is in the availability of a variety of simplified controls labeled 'Quick Fixes', which often photographers may find bring them most of the journey towards the final desired result.

Most of the panels within this module contain both basic adjustments as well as an 'Advanced' panel for those who want to exercise even more control. Of particular note in this regard would be the sharpening options. As discussed in our last issue's review of Perfect B&W, there are sliders in the this panel you won't find in Lightroom (to protect skin for example), while here in the Enhance section you'll find not only these, but sharpening presets for a variety of situations such as correcting focus, outputting to either screen or print, and a number of settings for specific paper types. This is an excellent resource for those often left uncertain as to the appropriate manual settings to use for particular situations, and indeed provides more functionality than

available within Lightroom itself — given you may also select from among progressive, high pass, or unsharp mask options.

Finally, there are a number of image adjustment presets included: from standard corrections, to cool effects — all available to preview in advance of their application via a resizable panel at left. We were able to achieve some very impressive looking results by way of this panel, with the application of just a few clicks.

## PORTRAIT

This module is where things really start to get interesting for the dedicated Lightroom & Photoshop user. So what does it offer? Simply put, the Portrait module takes all the time consuming, and often frustrating work out of smoothing skin, correcting blemishes, enhancing eyes and teeth, removing red eye, adding vibrance to lips, and colour correcting skin tone — all the while preserving a natural look which is often so hard to maintain otherwise.

Upon opening a photograph (of a person or group of people... not much use to you otherwise), the software automatically detects faces as well as applying adjustable control points around the eyes and mouth



to facilitate pinpoint precision in working with these areas. You then select the ethnicity of the individual you are currently working on, and address such elements as skin evenness, texture, smoothing, shine, blemishes etc. all by way of simple slider controls. As with all the other components, Portrait also includes a variety of presets available in the pane at left, as well as the option to save your own; however, we were able to produce excellent custom output using the sliders in such little time as to generally preclude our using the canned ones.

The results are indeed so quick and first-class, we feel this module alone is worth the price of admission for the entire suite. Thumbs up!

## EFFECTS

Next up, the Effects module provides a ton of user-selectable filter presets that alter

your images in all manner of interesting ways. Sounds like Instagram? It's definitely not. The focus here is not on an attempt to manufacture cool from the banal by way of a funky filter, but on image enhancement technology the serious photographer can really use to streamline their workflow.

Not only are the filters included herein useable on a day-to-day basis by virtue of their broad utility, but are layer based, providing the ability to stack one atop another. What's more, while you may certainly adjust the opacity of each layer — affording the photographer considerable control over the image generated — you are also given the ability to easily paint in or out areas that you wish to be affected or not.

Certainly the module also harbours filters that push the boundaries of taste, for

## PERFECT PHOTO SUITE 8



those among the photographic community that prefer a more ham-fisted approach to digital image processing; however, the vast majority provide viable solutions to common imaging problems. Favourites among the compendium of presets include Texture Enhancer found within the Dynamic Contrast group, as well as the entire 'Sunshine' group, and the Sky Enhancer found within the Colour Enhancer section. The functionality afforded by this module is so powerful, and its operation so easy to master, we found our initial skepticism fading fast, and now intend to frequently incorporate it within our processing chain.

## MASK

Now we'll skip over the B&W module (given we covered it extensively in our

last issue — definitely worth taking a look), and move on to the Mask section.

This module promises to remove the tedium from the compositing process, enabling you to swap in and out backgrounds with ease. In conjunction with the Layers section, we were able to achieve convincing landscapes wherein we had replaced a lacklustre sky with a more dramatic one in under 5 minutes. Included are a variety of tools for creating quick masks using broad strokes, and still others to refine your efforts — ensuring your end result is as authentic looking as possible.

Though not something we'd use every-day here, this module will definitely be a blessing for those occasions we find ourselves needing to augment reality; however, for fans of compositing, you'd be



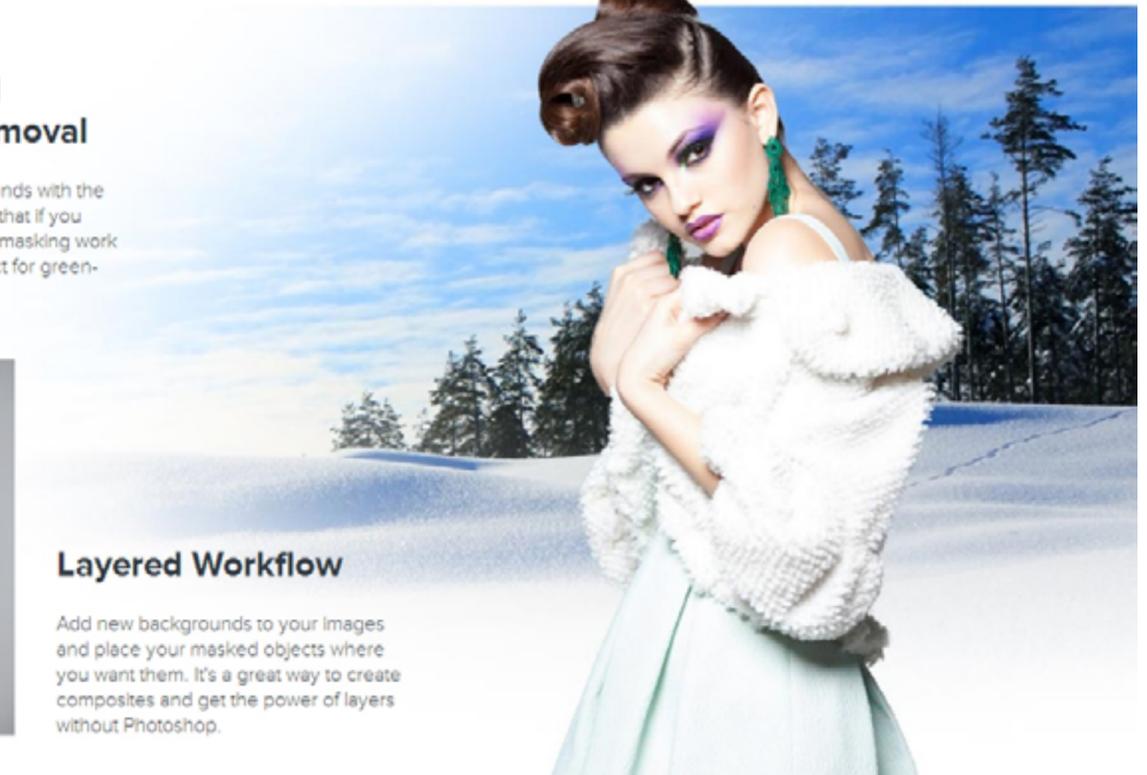
### Automatic Solid Background Removal

Remove solid color backgrounds with the click of a button. This means that if you shoot on a solid color, all the masking work is done for you! This is perfect for green-screen and studio shooting.



### Layered Workflow

Add new backgrounds to your images and place your masked objects where you want them. It's a great way to create composites and get the power of layers without Photoshop.



hard pressed to find a more full-featured and accurate tool at this price point.

## RESIZE

The final module in the collection addresses a frequent need experienced by photographers wishing to print their work at scales not directly supported by their image's native resolution without a significant loss in quality. This may be a result of a desire to generate a mammoth print from your DSLR capture, or create standard sized wall hangers from close crops, or even mobile phone shots.

Utilizing the universally well regarded Genuine Fractals engine, Resize promises to enlarge your photographs up to 1000%, without a noticeable drop in sharpness or detail. Sounds great... but is it true — and how does it stack up against Photoshop's enlarging algorithms?

Well seeking the answer to these questions, we ran a test utilizing one of onOne's stock images out of a sense of fairness. Instead of increasing by 1000% (actually we tried this, but the software took over 40 minutes to render and produced a file with a size of greater than 10GB... pretty difficult to work with), we decided to use one of the many presets to ensure we were seeing the software perform at its best. With specific selectable papers and their corresponding sizes from Canon, Epson, and HP taken into account, the software does its best to ensure the final image conforms to the specifications which best match the intended destination.

For our test we selected an Epson resin coated substrate with a 40x60" print size, and a 3000x2400px @ 300 pixels/inch input image. The resulting automatically optimized and resized crop (which is movable by the

user in advance of enlargement) yielded an image of 14,1400x9600px @ 240 pixels/inch. The processed enlargement came in at just over 2GB and took 10 1/2 minutes to render on a quad processor machine with a RAID 0 array and 16GB RAM.

So how did it do? Well take a look for yourself... pretty well we think. Here's the 100% view of the original and the enlargement, with the latter's area indicated on the former by the blue outline. Of course, in the original, you'd have to look closely at this area to determine whether the details are retained, and from what we experienced, in large they are.

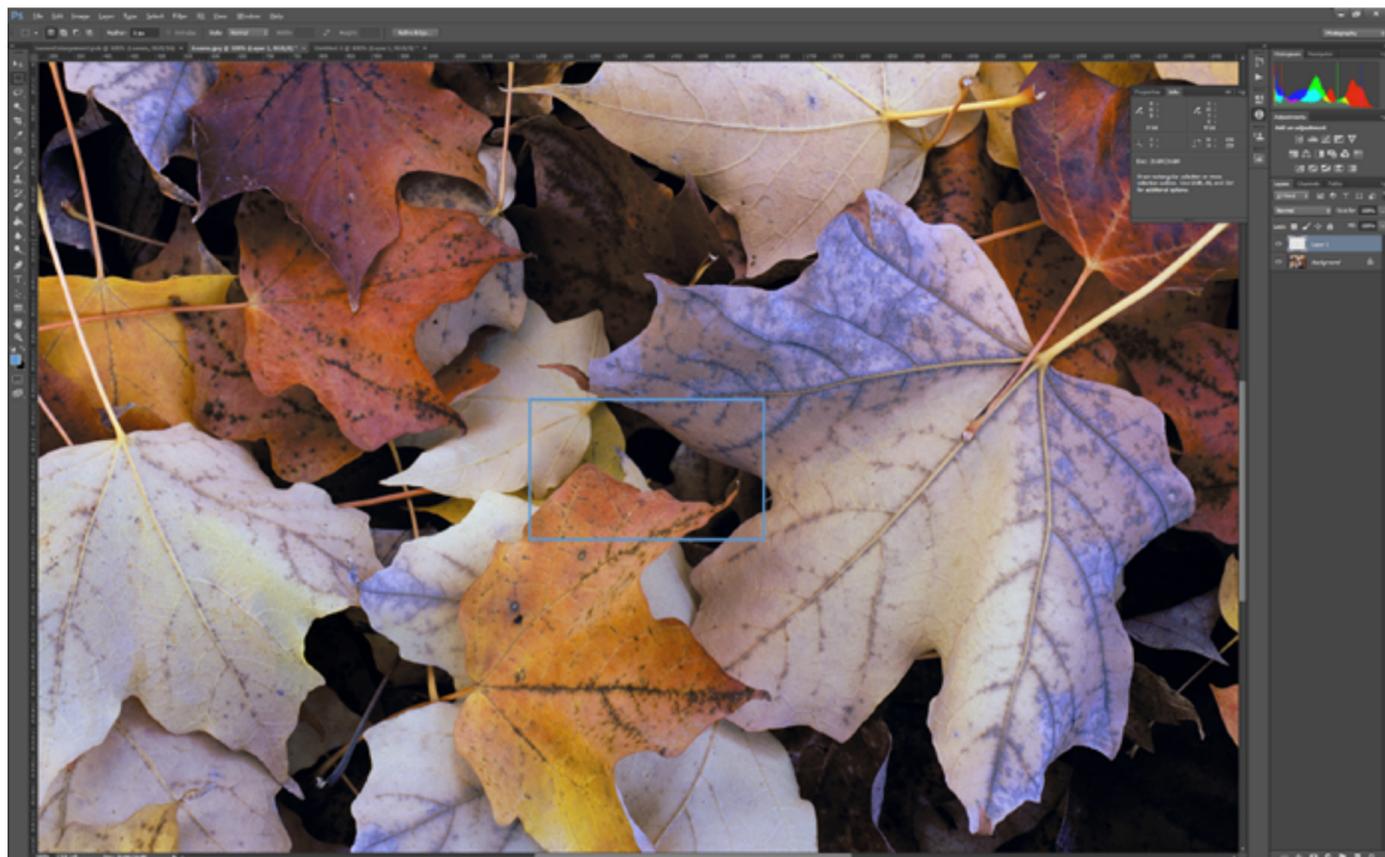
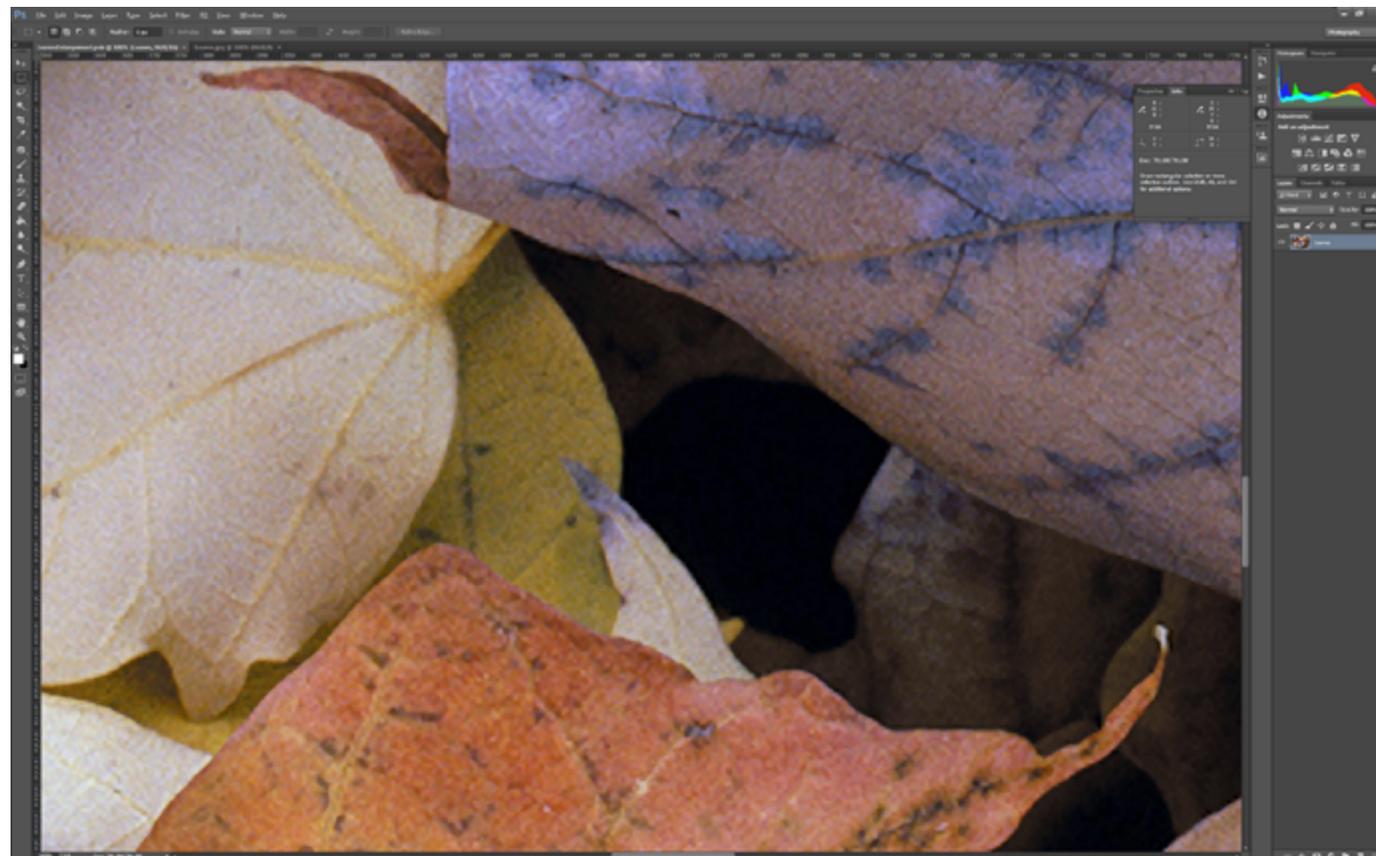
And how does it stack up against Photoshop? Here it does less well. While Resize did a decent job at preserving detail, Photoshop's effort in this regard was more convincing, and had fewer artifacts. Further, its task was

accomplished in 3 minutes... with the other resized document open in the other tab. A point for Resize however is that it does appear to preserve slightly sharper edges — certainly important in the final print.

In the end it's a bit of a toss up. Resize is certainly more convenient in terms of automatically adjusting to desired print sizes and substrates by virtue of its presets, while Photoshop appears to produce a slightly more realistic end product in significantly less time. If on the other hand, you don't own Photoshop, there's no question as to this module's value, and we'd recommend its use unreservedly.

## THE FINAL WORD

So is onOne Software's Perfect Photo Suite worth your investment in time and money? Unless you haven't been paying attention



## PERFECT PHOTO SUITE 8



to the last two thousand words, YES! For the stand-alone version without plugins for Photoshop, Lightroom, Aperture, and Elements, it's only \$79.99... a bargain if there ever was one. The plugin versions that integrate for seamless round-trip editing with the aforementioned applications are slightly more expensive at \$129, while the combo pack of the two retails for \$179. If, on the other hand, you're at all on the fence after having read this article, why not download the free 30 day trial? We're certain that after having evaluated it as we did, you'll be more than happy to exchange a little bit of currency, for a whole lot of digital goodness.

# The Frugal Photographer



As anyone who has amassed a sizeable collection of gear can readily attest, there are items among the pile that get used over and over again, yet were, when compared to their lifetime service utility, relatively inexpensive... or downright cheap! Still others, we view with a tinge of regret — sitting lonely in their cases, waiting for the wondrous occasion when they will yet again see the light of day. Reading this, you may find yourself glancing over at your \$900.00 16mm *f*/2.8 fisheye with a furrow in your brow... and trust us, you aren't alone. The fact is, there's tons of shiny gear out there designed to coax those precious dollars free of their cozy wallets... and tons of salespeople who are more than willing to assist in that goal, whether it truly represents a good investment for the photographer or not. So with this mind, let's take a look at some of the best values around in photographic equipment!

## PRIME GLASS

While having the advantage of often being significantly less expensive than zoom lenses of similar quality, primes (fixed focal length) additionally are the sharpest around. No compromises have been made to support a wide range, and so that 50mm *f*/1.4 or *f*/1.2 is going to yield pretty much the best quality image you can get for that focal length. Sure, this makes for less convenient shooting in dynamic situations, as you have to zoom with your feet; but the gains in both performance and cost savings more than make up for the necessity of movement. For about \$300-\$400, you can pick up a world class 50mm lens... versus a pretty lousy zoom in the same price range. Of course, with increases in focal length, come commensurate rises in price; however, from a cost versus quality perspective, it's very hard to beat

a prime. There's a kind of odd feeling I get when affixing one to a body (with the notable fisheye exception), a kind of warmth and affection reserved for very few items in my kit. Do yourself a favour, and give primes a try!

## HANDY ACCESSORIES

There are two accessories I use every single time I pick up my camera, and both were super cheap. I use them every time, because they are actually permanently attached to all my bodies. The first is the HoodEYE Eye Cup by Hoodman Corp. This awesome little piece of technology connects directly to your viewfinder and features a hypoallergenic silicone rubber cup that forms to your eye socket, blocking out all external ambient light. As a result, elements seen in your viewfinder are crystal clear, even on the sunniest of days, and your depth-of-field preview button will actually get used. At only \$24.99, each, these are definitely one of the best investments I've made in accessories!

The other item? An LCD cover. As I'm a Nikon shooter, and don't own any bodies with screens that flip into protective positions, I purchased company branded covers for about 10 bucks each. While I'm not at all a fan of putting protective filters on my lenses, covering my LCD doesn't affect image quality, and protecting it against the inevitable zipper and button scratches

it would incur otherwise just makes sense. They're certainly easy to remove and re-attach should one wish to; but frankly they are so non-intrusive, I have yet to do so.

Another item in the same vein, and also by Hoodman, is the HoodLoupe. This handy little device allows me to clearly view my LCD in the brightest sunlit conditions. With a built-in diopter to ensure accurate focus, and a lanyard to prevent its ever being far from reach, my HoodLoupe gets a good workout whenever conditions merit. Though more expensive than some items

on the list, at between \$99 and \$129, this item more than paid for itself the first time I shot an outdoor equestrian event... and it's seen heavy use ever since. Highly recommended.



HOODMAN  
HOODEYE

Next on the list for me would definitely be a

professional strap. I had always been content with the ones that shipped with my camera bodies (I guess because they seemed 'good enough', and I didn't know any better), until I bought a Nikon D3. I couldn't believe the abomination they called a strap that shipped with what, at the time, was a \$6000.00 CAD body. It's like they actually went to their R&D department and shouted, "Create the absolute cheapest, crappiest strap you can possibly conceive of — we need something to offer stark contrast to our awesome new pro body!"

All kidding aside, it really was horrible, and led me to investigate the variety of replacement options on the market. Fortunately, I stumbled across UPstrap, and haven't looked back since. For \$50 and under, depending on your requirements, these super-grippy, comfortable straps won't slide off your shoulder every 5 seconds, and feature military quick release mechanisms for when you want it out of the way (using a tripod for example), and are conservatively rated at up to 80 pounds carrying capacity. If you haven't experienced the difference between a pro and a stock strap, you owe it to yourself to take a look!

One more item that should definitely be on your list should you not have one already: a cable release. Available for under \$50, these permit the photographer to do two things: release the shutter without introducing external vibration from your body — key in longer exposures — and additionally allow them to interact more freely with their subject. It's significantly less obvious when

you're taking a photo using a cable release; therefore, you can take advantage of casual appearing conversation to search for exactly the right moment to shoot... without having the model tensing up and looking unnatural in anticipation of it. More expensive versions incorporate features like intervalometers etc... but you'll find this novelty function going unused more often than not. Just stick to the easily replaced, cheap, reliable \$30-\$50 release, and you'll be in good shape!

Last, but certainly not least in the indispensable accessory category, is the vertical grip. Unless you have a pro body which features one of these built in, you're definitely going to be wanting to pick one up. Not only do they make shooting in portrait mode significantly more comfortable, but a number offer the ability to add a supplementary battery — doubling the shots you're able to take in advance of charging. Further, many allow you to utilize standard AA batteries in a pinch instead of the custom variety normally required. This can be a lifesaver!

These products are so useful, we find most people, once having attached a vertical grip, never take it off. Prices vary widely (anywhere from \$40-\$400 depending on the model of body you are affixing it to), but whatever the price, a vertical grip will prove so beneficial, you'll soon wonder how you did without it.

#### AFTER THE SHOT

As we all know, capturing the RAW file is just the beginning of the photographic process. So what are the best bangs for the buck at the latter end of the production chain?

First up, RAM. Yes it's boring — you won't sit there polishing it, dreaming about how you'll use it next — but few things will speed your workflow more, and you'll use it every day. While most of your applications will benefit from the extra memory, RAW editors and image manipulation tools gobble RAM like a fat dude attacking a bundt cake... so the more the merrier!

Speaking of best value RAW editors and image processors, which among them really deliver the goods? Well, as you probably guessed, for our money, you can't beat Lightroom. It does pretty much everything you'll ever need, and for what it doesn't there's always plugins like Perfect Photo Suite 8 (also reviewed in this issue!). With extensive cataloguing capabilities, industry leading RAW processing, web and book publishing, slideshow production, and an excellent print engine, Lightroom 5, currently on special through January 11th, 2014 at \$119 USD, would be a steal at double the price.

Finally, let's talk backup. I know...yawn. So many people talk a good game when it comes to protecting their images, but when disaster strikes, find themselves woefully unprepared. What are you going to do if your backup strategy consists of burning CDs or saving to external drive when your home or office burns down? Certainly, drives are



cheap, and a good solution to ward against lesser calamities such as internal hard disk failure... but they're no use if a tornado spirits your house off to Oz. Cloud based backup services appear to be the answer here — but caveat emptor! Many of these are extremely pricey and not designed for the huge volumes of data utilized by photographers. Still others, while featuring an 'all you can eat' approach, and offering unlimited storage, throttle your bandwidth to such an extent as to render these services next to useless. In a recent example, a photographer using the popular Carbonite backup service discovered that her bandwidth was throttled to such an extent as to take an entire year for her drive to be successfully back up... and that was if she added no more data!



# BACKBLAZE



**W**ith these points in mind, we took a look at a number of services before making our selection: Backblaze.

Founded by former Apple employees, Backblaze features unlimited storage for multiple computers, no bandwidth throttling (unless you opt to throttle it yourself in the preferences), an extremely easy to use interface for both Windows and OSX, automatic detection of what needs backing up (ignoring OS components), three recovery options, and more... all for only \$5.00 every month. If you want to save even more, term options are also available: \$50 (\$4.17/month) for one year, and \$95 (\$3.96/month) for two. What's more, they offer a free 15 day trial — so what have you got to lose (other than your data!)?

## FINALLY

It's our hope this list serves to save some people from themselves. We know the allure of shiny things all too well; and while you'll probably never get over lens lust completely, making a smart purchase decision can often sate your desire to spend a bundle on something a little less practical. So how about starting the new year off with a resolution: refusing to buy any photography related gear you can't see yourself using at least 20% of the time you're engaged in photographic pursuits. That gives you a little wiggle room for the sparkly trinket, but keeps you focused on what's really going to go far in helping you achieve your artistic goals.

## Join us in 2014 on any of our African group photographic safaris

### Wild Waterways of Botswana

If adventure and wildlife photography are your perfect mix for vacation time then you really want to join us on this amazing photo safari, where we explore the waterways and wildlife of Botswana at the confluence of the Chobe and Zambezi rivers, before heading off to the awe-inspiring Victoria Falls.

**Date:** 3 - 13 September 2014

**Spaces:** 8 persons max (sharing)

### Ultimate Big 5 Safari

Wildlife photographers will not find better opportunities to get up close & personal with Africa's Big 5 than on this amazing safari! Lion, leopard, rhino, buffalo and elephant await you at the incredible Sabi Sabi Private Reserve where we book exclusive use of the Little Bush Camp for 7 days.

**Date:** 5 - 12 October 2014

**Spaces:** 10 persons max

### Namibia: Wildlife & Landscapes

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# GEAR GUIDE

Those considering a new DSLR are certainly in good company — digital single lens reflex cameras are still flying off store shelves, despite the dire predictions pundits have made about them being supplanted in the market by mobile phones. Shoppers are certainly spoiled for choice as well, with the major manufacturers having released a variety of new models to select from among. This is also, however, a source of consternation for the average consumer... with so many options, which best suits the needs of the intended user? Well, in an effort to aid in this evaluation, we've chosen to review two of the latest entries from rival brands Canon and Nikon: the 70D and D5300 respectively. Now you may say that we're comparing apples and oranges here, and in part you'd be correct. After all, the bodies retail at \$1199



for the Canon 70D and \$799 for the Nikon D5300 — a difference of 34%. However, when you compare features, you'll see there are a lot of similarities, and indeed pros and cons for each - price being only one of those. Additionally, when you consider the usable lifetime of your body, and amortize the difference over that period, the cost differential becomes negligible. Sure, that's easy to say, but for people on a budget, \$400 is certainly significant. Mind you, if you buy the kit which includes a lens for each and (certainly an attractive option for first-time DSLR owners), the difference shrinks to \$350. So what we endeavour to accomplish with this comparison, is to determine the strengths and weakness of each, and let the reader decide whether cost should be the deciding factor in a purchase decision. Ok, with that out of the way, on with the show!

## FIRST IMPRESSIONS

Our initial thoughts on the two bodies were that they were similarly well constructed, with the 70D featuring an aluminum and polycarbonate resin design, while the D5300 was manufactured using a new 'monocoque' technique which renders it as a single unit which retains strength while reducing weight. The 70D has the advantage of weather resistance, while the D5300 is about 7 ounces lighter. Further, the 5300 is physically smaller, though the difference doesn't feel substantial when handling the respective units.

Ergonomically, both bodies, though considerably different, demonstrate the years of experience and incremental refinement each company brings to the drawing board. Each fit well in our hands, and though the buttons are on the small side, they were easily activated — even while wearing thin woollen gloves. Both cameras have built-in wifi which facilitates file transfer as well as remote camera control via desktop software or even mobile phone application! Controls, however, are indeed one area in which the cameras differ substantially.

## CONTROLS

The 70D features dedicated buttons for ISO, metering mode, autofocus (drive) type selection, and an autofocus activation (AF-



ON) on the body's back. Further, the camera has a depth-of-field preview button... an extremely useful function wholly unavailable on the D5300. This functionality is even available on the LCD — very handy. On the other hand, the Nikon has a dedicated exposure compensation button which the 70D lacks... and this is definitely a plus.

Both cameras sport a multi-function control which feature an 8 way selector; however, the Canon additionally incorporates a Quick Control Dial, which is essentially a selector wheel surrounding the button — useful in quick navigation through menus or assignment to a variety of other functions. Further, the Canon also includes an AF point selection button, which by default you must activate in advance of choosing which among the 19 you wish to focus on by way

of the multi-selector. This seems a waste of time to us and indeed took a little head scratching and manual perusal in order for us to figure out. You can of course program the multi-selector to perform this function without the intermediary step, but why by default you'd want this to be assigned to anything else is frankly beyond us.

Do these differences matter? Definitely. On more than one occasion we missed a shot we were trying to capture on the D5300 as

a result of the necessity of hunting through menus on the LCD in order to access these common functions. While certainly you may program the function (fn) and exposure/focus lock (AE-L/AF-L) buttons to serve your needs here, Nikon's inclusion of two 'info' buttons seems superfluous, and would be better served had the second been assigned another role. On the other hand, Nikon's menu system is very well thought out and organized; and we're certain with more experience we'd become pretty adept at quickly altering the camera's settings resulting in significantly fewer missed shots.

## DISPLAY

Another area of significance in terms of difference between the two bodies is the display. Both bodies sport articulating

screens which enable the photographer to view them at almost any angle, providing for some unique and creative perspectives in framing. However, the Canon has both a top monochromatic LCD in addition to its rear colour touch screen. On the other hand, while it's packed with information, we found it no more useful than the info screen on the D5300 — which indeed was easier to read. On the Nikon, you're only looking in once place to determine your settings, while on the 70D you're often looking in two.

This really doesn't matter much to the serious photographer however who typically wants to be looking through the viewfinder and framing his subject, while adjusting the controls sight unseen, and seeing its display update correspondingly. Here Canon has the edge, as more information is avail-

able via the viewfinder, and more on-body controls to common functions are accessible. Further, the 70D's viewfinder features 98% coverage versus the D5300's 95%. Is 3% significant? You bet. Of course the LCDs on each provide 100% coverage, but unless you are always find yourself shooting in Live mode, you'll definitely notice 3%.

One additional item of note is that the electronic level incorporated within the 70D's viewfinder is disabled by default. Why such a useful tool should be relegated to obscurity in the depths of the menu system, again left us puzzling over this software design decision. On the other hand, it's not available at all on the Nikon.

Oh... did we mention the 70D has a touch screen? Yes we did. Despite the fact that the D5300 has a larger rear LCD (3.2" versus 3"), its pixel density is lower (1,037,000 versus 1,040,000 over a smaller area), and doesn't support touch interaction. The Canon's screen enables the user to access menu functions, pinch, zoom, and swipe on images, and adjust focus in live view. We found this handy in the latter two instances, as given our familiarity with touch screens these days, pinch and zoom is a rather intuitive means of interacting with photos, while adjusting the focus point, in video particularly, was an easy matter... and we were even able to drag the reticle around with a gloved finger — impossible to accomplish on your iPhone. Sounds great right? Did we find ourselves using the touch screen often? Nope. Could we live without it? Yep. Still, it's a cool feature, and we look forward to further innova-



tions incorporating touch screens in future. Seems like a bit of a blowout so far in favour of Canon right? Well you'd expect that for the extra money, wouldn't you — but hold on...

## SENSOR

Well, here's where the rubber meets the road so to speak. All the fine optics and ergonomically well designed controls in the world aren't going to produce a great photograph if your sensor isn't up to snuff. Both cameras employ APS-C (non-full-frame) CMOS sensors, with the Nikon providing 24.2 versus the Canon's 20.2 megapixels. While as noted in previous issues, we don't believe more megapixels necessarily represents an advantage, in this case it does. As the noise characteristics are similar on both bodies through the ISO spectrum, having the additional crop latitude afforded by 4 additional MP is a nice bonus.

More important however is the dynamic range available to the photographer for capture by the sensor. Here Nikon has a clear edge with a range of nearly 13.9 Ev versus Canon's 11.6. That's a pretty huge difference.





As a result, you'll find while preserving highlights in certain situations on the 70D you'll be losing shadow detail that would be retained by the D5300 under the same conditions. Further, Nikon's ISO range maxes out at 25,600, while the Canon's is limited to 12,800. Now, while hopefully you're not going to be finding yourself shooting in such extreme conditions as to require its utilization often, the availability of the 25,600 can sometimes spell the difference between getting the shot and not... noisy though it may be. Mind you, the 70D provides shutter speeds of up to 1/8000th against 1/4000th for the D5300, gaining you latitude at the opposite end of the spectrum. So you need to ask yourself, how often are you limited by too little versus too much light? I think most of us would share the same answer...

The Nikon D5300 also features 39 focus points, which offer significantly more discretion in selection about the frame than Canon's 19 — but that's not the whole story here. Of those 39, only 9 are the more accurate 'cross type', while all of Canon's conform to this specification. In addition, the introduction of the D70 marks the debut of Canon's new 'Dual Pixel CMOS AF' design which essentially splits each pixel into two discrete photodiodes, enabling phase detection over 80% of the image frame in live mode. This promises to dramatically improve autofocus operations — particularly in video, where many professionals still rely on manual focus to achieve best results. All one need do is tap the LCD where the new focus point should be, and voilà, the camera smoothly transitions to the new subject

smoothly, if not altogether rapidly, and even works well in low light. If you're interested in shooting a lot of video, this is a definite tick in the pro column for the Canon. If on the other hand, you're mostly shooting still images through the viewfinder, you won't really benefit from this technology.

On the topic of video however, we rather unwittingly discovered a limitation of the D70's design. While Nikon sent us a fast SD card to accompany its D5300, Canon failed to include any at all. As our staff primarily use cameras that utilize compact flash cards, we only had some older SD cards kicking around. Not thinking twice about it, we popped one in the 70D and went about our tests. When recording video, the Canon choked after anywhere between 2 and 5

seconds. We thought we were doing something incorrectly, pored over the manual, and finding nothing, tried swapping cards with the one that Nikon had provided... smooth as silk. Figuring we had just used a bum card, we tried another — same result. Then we put the card we had initially used in the 70D into the D5300 and started recording video at the same resolution settings... not a single hiccup. Further, while the Canon is capable of capturing 7 frames per second versus the Nikon's 5, we were never able to achieve anything remotely close to that using the original card. Clearly the 70D requires a more substantial investment in SD card technology, or you won't be getting the performance its capable of (if any at all), while the D5300 is a lot less picky.



## MISCELLANEOUS

While the above covers the majority of differences between the 70D and D5300, there are still some additional features to consider. First among these is the fact that Nikon's entry includes a built-in GPS receiver which automatically updates your image's metadata with location information. While that mightn't seem particularly important upon first consideration, you may be forgetting Lightroom's ability to utilize this info in support of its cataloguing function. This makes organizing your images significantly easier, and can save considerable time in locating shots in large collections where you've been less than thorough in your application of keyword metadata (yes we're looking at you, majority of photographers!)

GPS receivers are certainly available for the 70D but of course represent an additional investment, are an extra thing to remember, and add to the mass of your gear.

The nod on battery life however goes to the Canon with its 1,000 shot rating as opposed to Nikon's 600. This mayn't seem like a huge deal, but if you are an event photographer, 40% more shots is a key advantage.

Further, for flash photography, the 70D supports sync speeds up to 1/250th while the D5300 tops out a 1/200th... not a huge difference, but important to some studio applications.

Finally, should you be considering purchasing the kit, there are two options available to you when buying the 70D, while only

one with the Nikon. The former ships with either the 18-135mm f/3.5-5.6 IS STM, or an 18-55mm f/3.5-5.6 IS STM lens, while the latter includes an 18-140mm f/3.5-5.6 ED VR AF-S DX unit. Canon shipped us the 18-55mm with their evaluation unit, while Nikon's was unavailable as yet at the time of review. From our research, as far as kit lenses go (we're not fans in general, as has been detailed in previous issues), both seem relatively capable, and a decent option for people that want to get up and running quickly while minimizing expense. When actually testing the 18-55mm, we achieved fairly decent results; and while the lens was somewhat prone to flare, we have few reservations recommending it as a viable option for people just getting started in the DSLR realm.

## CONCLUSION

So is the 70D or the D5300 the camera for you? Well that all depends on your priorities and budget. Certainly while the extra \$400 for the 70D buys you more camera in many respects, the D5300 is no slouch, and has many advantages of its own. Ultimately should you wish to opt for the higher expenditure, you may also wish to check out the Nikon D7100 which is positioned more closely in both price and features with the 70D. What we were endeavouring to accomplish with this article however, is to illustrate that more expensive isn't always your best option depending on your shooting requirements, and to highlight both the strengths and weaknesses of Nikon and Canon's very latest entries into the DSLR sphere. We think they've both done an excellent job!

# MUSEO

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**I**nevitably, as an individual evolves in their photographic pursuits, typically from shooting flowers and squirrels through first attempts at portraits and landscapes, they come to understand, often to their considerable dismay, that their work consistently resembles that of pretty much every other beginning or intermediate photographer. While some are content to master the technical aspects of creating a well exposed and traditionally framed image, the more ambitious are driven to differentiate themselves from the crowd, and put a personal stamp on their work. With millions of photographers out there striving to accomplish a similar goal however, this may prove no easy task... so how best to go about it?

## FIRST THINGS FIRST

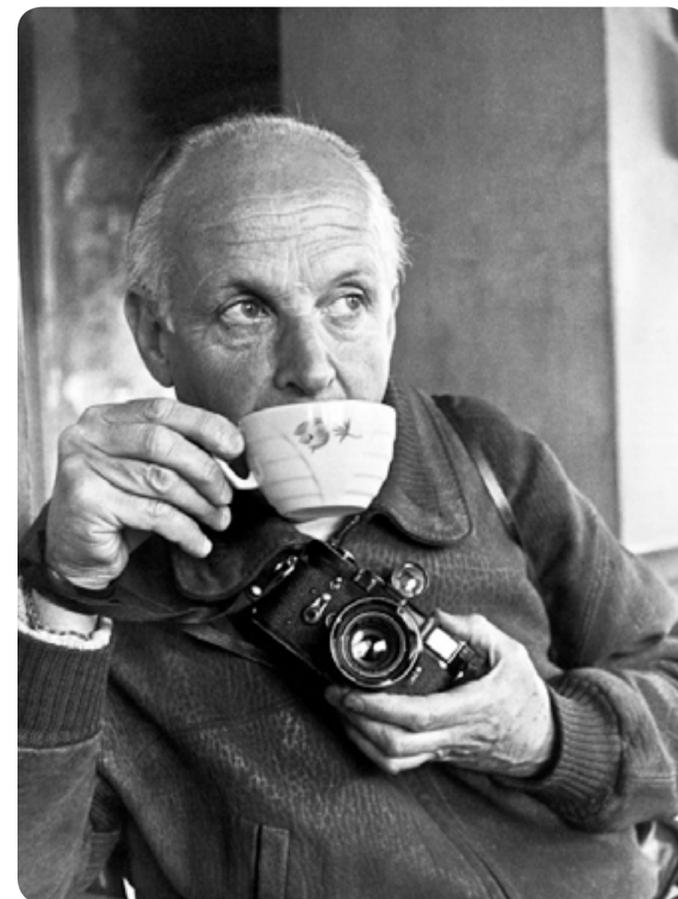
Unless you've determined your 'style' is defined by the creation of universally bad photographs (and trust me, we're familiar with many who apparently have decided to go this route), you need to know the 'rules', both technical and compositional, in advance of making any conscious decisions to break them. Mastery of the basics will equip you with the tools necessary to move on to the next step: imitation.

As a lover of photography, we assume you appreciate the work of other photographers. Find a few whose output you enjoy, and clearly have a unique look to their images — then attempt to recreate their techniques using your own subject matter. This isn't

to say your style should closely resemble that of another; however, moving beyond the basics requires the acquisition of additional knowledge, and how better to obtain it than by experimenting in this fashion?

It's said that imitation is the sincerest form of flattery; but in this case, that's not your objective, and is merely a stepping stone toward defining your own personal photographic flair. These new techniques will be added to your bag of tricks, and can be employed in combination with others you've absorbed along the way to aid in providing unique character to your compositions.

That being said however, there are, of course, no real original styles. All art is built upon the foundation of everything that has preceded it. Your goal here is to acquire



Henri Cartier-Bresson

the building blocks of this foundation in order that you are well equipped to create imagery that stands out from that of your peers. After all, there are only 12 tones in western music, yet a Bach fugue and Kanye West's latest abomination are as different as chalk and cheese. The former composer, exhibits an absolute mastery of every aspect pertaining to the subject matter and is praised for his work hundreds of years after his demise; whereas the latter clearly hasn't a clue, and will in all likelihood find their efforts consigned to the dustbin of history. (Sorry Kanye fans — the guy's just horrible).

## SPECIALIZATION

While we certainly don't recommend becoming a 'one trick pony', particularly in the highly competitive environment photographers find themselves in these days, in terms of stylistic development, specialization is key to progression. Having undertaken the previous step, imitation, you'll have discovered particular photographic subjects and techniques you are drawn to. Are you intrigued by geometric shape and line? Vivid colour? Minute detail? What really grabs your attention in an image? Your next task is to seize upon one of these aspects and pursue their capture with rigour — to the exclusion of all else — for a protracted period... say a month or so... then move on to the next. In so doing, you will be in excellent shape to discover how best to highlight these elements within a larger context, and further refine your personal style by discovering which combinations of these most appeal.

## TAKE A STEP BACK

It's often helpful to examine other areas of interest in your life and see how they might relate to your photographic pursuits. Do you like industrial design? What are the principles employed in the creation of attractive objects that may well be utilized in your photography? Are you drawn to texture? How can you share your affection through the captured image? Music lover? What feelings do your favourite songs evoke within you, and how can you express these within your photographs?

What about your personality? Are you serious? Funny? Whimsical? Are these traits reflected in your photographic output? How would you go about injecting your personality into an image in the first place? The answer is unique to the individual, though upon arriving at it, you'll discover significant progress in defining your personal style.

## DESCRIPTION

By this point, you probably have a pretty good idea of what it is you are interested in shooting, how you want it to look, the emotions and ideas you wish to convey, and above all, how to achieve these objectives without a considerable measure of head scratching.

Next, given the goal is to define your personal style, that's exactly what you should consider doing. What words would you use to best illustrate to a stranger what they could expect to see and feel upon encountering your work? If you can't describe it, you probably haven't truly defined it.

## TEST IT!

If you've a group of people familiar with your work, take a variety of photographs from multiple sources, and include your own new images within the mix (carefully avoiding those which may be readily discerned as depicting your locale). Show them to one of these individuals, and ask them to pick out which are indeed yours. Try this exercise with all of them and record your results.

Note, many will try to flatter you by selecting those among them which they feel are best; so inform them of your objectives in testing to see whether your style is evident, and consistent enough to be easily recognized by one familiar with your photography. If they have a great deal of trouble, you probably have more work to do. If, on the other hand, they get a significant percentage correct, it may be time to showcase your work to a larger audience!

Finally, not everyone has the creative vision and talent to become a world-class photographer; but that doesn't mean you can't be as self-expressive with your tools as possible. Developing a personal style and the commensurate repertoire of skills takes time, introspection, and practice; and with photography, often the journey toward this goal is as enjoyable as its achievement. Have fun!

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# IN THE ZONE



ANSEL ADAMS, 1950

## WHAT'S IT ALL ABOUT?

As with any medium that attempts to record information which normally passes ephemerally through our human sensory organs, be it sound, image, vibration, whatever... photography is subject to limitations in dynamic range. That is, in this case, the difference between the lowest luminance value the sensor wells can record versus the highest, as measured in exposure value (EV), otherwise known as stops. (E.g. the difference between  $f/2.8$  and  $f/4$ , or  $f/4$  and  $f/5.6$  is one EV)

At present, DSLRs fail to adequately replicate the palette of data available to our senses — at best yielding around 14 EV of dynamic range (comparable, if slightly lower in some cases to that available via film)

— while the human eye is capable of seeing in the neighbourhood of 20 EV. This of course presents difficulties in accurately portraying a scene which encompasses the complete range of luminance values perceivable by our own sensory apparatus.

The Zone System was originally developed to address this problem throughout the entire photographic chain — from capture through print. It derives its name from the 11 discrete tonal regions designated 0 through X (using Roman numerals) the photographer uses to evaluate the scene he desires to capture and process. Zero (0) represents pure black, while X (10), corresponds to pure white or specular highlights. Though not precisely true, as the Adams designed Zones to correspond to density levels within a print, it is helpful to think of each step as being equivalent to one EV.

Here's how the values relate to each other in the real world according to Ansel Adams:

Ok, fine... so what do you use these zones for anyway? Well first off, you have to know what you're shooting, what's important within the scene, and, if its contents significantly exceed your camera's dynamic range, what elements in which zones may be sacrificed in support of capturing its key essence should you only wish to employ a single exposure. This decision process is known as visualization, and forms the basis of making informed choices in advance of depressing the shutter release to ensure what you capture meets with your photographic objectives.

In order to apply this knowledge using the Zone System, you need three things: a spot meter, a camera capable of manual mode, and a willingness to learn.

## IN PRACTICE

First off, while it's best to have a hand-held spot meter (ideally one that provides measurements in EV), you can get away with

Zone	Description
0	Pure Black
I	Near black, with tonality but no texture
II	Textured black; the darkest part of the image in which slight detail is recorded
III	Average dark materials and low values showing adequate texture
IV	Average dark foliage, dark stone, or landscape shadows
V	Middle grey: clear North sky; dark skin, average weathered wood
VI	Average Caucasian skin; light stone; shadows on snow in sunlit landscapes
VII	Very light skin; shadows in snow with acute side lighting
VIII	Lightest tone with texture; textured snow
IX	Slight tone without texture; glaring snow
X	Pure white: light sources and specular reflections

With the advent of digital technology and sophisticated built-in metering systems, many regard the Zone System as pioneered by landscape photography legend Ansel Adams, and portrait specialist Fred Archer between 1939 and 1940, as quaint, complicated, and completely superfluous. But are they correct, and can this system for nailing exposure be applied in today's world, where technological brute force is brought to bear on a given capture, comparing against a database of literally thousands of images to determine its best rendering?

Well, they say you can't teach an old dog new tricks; but can you teach a new dog old ones? Of course!

using the one in your camera if you don't have one. For the simplest application of the Zone System, look for the brightest area in your scene that needs to have detail in it — let's say some water cascading over a waterfall — now spot meter for that area. If you are using your camera's spot, you may have to use a telephoto lens to ensure the area metered is of one consistent tonality. Ok, so according to our chart, this area should be in Zone VIII, though, depending on your camera's dynamic range, this could very well be Zone VII, and it is often safer to select this to ensure your highlights aren't blown and detail is preserved. Further, it is often difficult to print detail from this zone should you wish to do so. Many cameras and printers have a usable textural range of between Zones III and VII, though this is in-

creasing every year. Experimentation with your equipment will yield the information you need to make an informed decision.

Understanding that a spot meter measures middle grey (18%), or Zone V, let's play it safe and increase our EV by two stops to Zone VII, by either increasing our aperture or lowering our shutter speed. For example let's say our meter tells us that at  $f/8$ , our shutter speed should be  $1/250$ th. We can either open our lens up to  $f/4$ , or decrease our shutter speed to  $1/60$ th.

Of course, this depends on your knowing what the full stop increments are to begin with. As a refresher, in terms of aperture they are:  $f/1$ ,  $f/1.4$ ,  $f/2$ ,  $f/2.8$ ,  $f/4$ ,  $f/5.6$ ,  $f/8$ ,  $f/11$ ,  $f/16$ ,  $f/22$  etc. As far as shutter speed goes, they are easier to remember: as at  $f/1$ , EV 0



is 1 second, EV 1 is  $1/2$ , EV 2 is  $1/4$ , EV 3 is  $1/8$ th and so on, halving in time every stop... while in the opposite direction EV -1 is 2 seconds, EV -2 is 4 seconds etc., doubling in value every stop down to EV -6 at one minute. Many cameras feature shutter speeds in  $1/3$  stop increments, so that makes things easier to remember should you have difficulty.

Let's say we are shooting a portrait of someone with light skin. We know from our table that this should fall within Zone VI... as our spot meter shows us the appropriate value for a Zone V face, we increase our EV by 1 stop. If we on the other hand wanted to place more importance on the shadowed areas within the composition, we might make a different exposure decision entirely.

Should your scene include elements you wish to include from both ends of the dynamic range scale, you may well opt to shoot multiple exposures and combine them manually in Photoshop, having specifically selected which Zone you wish each to be rendered in — foregoing HDR's complex algorithms, artificial looking results, and often mushy mid-tones, opting instead for complete control.

The Zone System is all about knowing what you want, and not leaving exposure to chance or the whims of built-in metering to achieve your goals. It definitely takes a little practice, but we're certain the results speak for themselves. So why not make the shift to manual? Do you know a professional driver that sits behind the wheel of an automatic on the track? We didn't think so.

# SECRETS

*Not Rich?*  
No Problem.

As everyone who has ever dreamed of setting up their own studio soon discovers, things can get really expensive, really fast! Certainly there's the inevitable cost of lights, background stands, reflectors, and C-Stands to take into account — and you generally don't want to skimp too much on these (though foamcore does indeed work well in a pinch as a cheap alternative to reflectors). However, this only covers the barest of essentials... what about the rest of it? Are you going to go out and spend over a hundred dollars on a high-end posing stool? Still hundreds more on high quality muslins? Are these really going to add enough value to your images to justify the expense?

Ultimately, as you progress, the answer to these questions is yes, as you become more interested in gaining smaller improvements in your photographic output; but as you are getting started, should you spring for the top-of-the-line? We don't think so.

## BACKGROUNDS

When you're just getting started there are really only two backgrounds you need to buy: black, and white. Rolls of paper in each colour are quite inexpensive, and provide enough flexibility in shooting scenarios which require a background be utilized. A possible addition to this list would be Chromakey, should you be interested in compositing, as this colour is needed for the background extraction process used by many software packages which specialize in this operation.

Other background materials you can procure inexpensively, or indeed free of charge, include heavy window drapes, bedspreads, quilts... anything (preferably without visible seams) with enough density to disallow the transmission of light through its surface, while being non-reflective in nature. You'd be surprised at the interesting effects you can achieve with these items by using a shallow depth of field to capture your subject, yet render the background as a pleasant blur.

Another cool material you can employ in this capacity is translucent corrugated plastic — inexpensively available from nearly any building supply store. Take a gelled strobe or hot light or two and place it behind this backdrop to lend a space-age aspect to your scene. You may even want to spray water

on it to create a shower-like environment. The possibilities for cheap backgrounds are only as limited as your imagination!

## LIGHT MODIFIERS

Gobos (their name derived from “goes between optics”), are extremely valuable in providing style and flair to your images, and may be easily and inexpensively constructed by the photographer themselves. Utilizing cardboard, foamcore, bristol board, or whatever opaque and easy to work with material you have at hand, you may create a variety of gobos that allow you to enhance the mood of your shot by adding, for example, the shadow of a window frame, horizontal blinds, or other intricate patterns of light falling upon your subject. One thing you should be aware of here however, is the risk posed by



the heat emanating from lights as you move your homemade gobo closer to them, depending on the effect you are attempting to achieve. There's a reason professional gobos are made primarily of metal... and that's it.

Another light modifying idea which can be adopted for mere pennies, is to illuminate your backdrop by firing your strobes through clear bottles containing water mixed with various hues of food colouring. This procedure can produce an unlimited array of colour combinations and will definitely add some pizzazz to your capture.

## PROPS

One of the main issues in coaxing a good performance from a studio subject (unless they are a professional model), is the fact they generally don't know what to do with themselves in front of a camera in this somewhat formal setting. While we covered this topic extensively in our 'Working With Models' issue to be found in Volume III, one of the surest ways to break the tension and provide a focal point for action is to provide your model with a prop. Fortunately, props are also one of the least expensive and most impactful additions one can make to their studio. So what kinds of things should you be looking for? Well, first let's define the word. A 'prop' is actually short for 'property', and is con-

sidered to be any movable object on the stage or, in the photographer's case, studio set.

Let's start with the most basic of these which enables a wide variety of poses and is pretty much indispensable — the seat. Instead of buying yourself an expensive posing stool however, why not pick up some old wooden chairs from a garage sale or flea market? They have more character and allow for



shots with resting arms and draped articles you wouldn't be able to get from a standard stool. Simply cut the back from one with a wood saw and there's your stool variant... or pick up a cheap stool at Ikea if that idea offends your sensibilities!

Another standard studio prop consists of boxes or blocks in various sizes you may have your model pose among and interact with, or they may form the foundational structure for yet other props. These are easy

to make from MDF or plywood, but easier still, why not go to a toy store, or yet again Ikea, and see what's on offer there? You should also keep your eyes open for large translucent plastic or acrylic cubes, which are great for placing lights within to create mysterious glowing effects. Further, pillows can often substitute for some of the functionality offered by blocks, and provide a warmer, earthier environment.

**Y**et another item which affords a great deal of posing opportunity is, of course, the table. What you want here is something inexpensive, portable and lightweight, which stores away in a convenient manner when you're not using it — a card table. As you are able to employ a cloth and additional props to make this platform appear any way you wish... from picnic through 5 star restaurant, the quality of the table, beyond its basic sturdiness, is unimportant. As you'll often be shooting crops in the studio anyway, the small size of the table is irrelevant, and you don't want it getting in the way of your lighting setup anyway. Again, these items are readily available for next to nothing at garage sales and flea markets everywhere.

As mentioned, it's tough getting a studio neophyte to relax and provide their best, given their unfamiliarity with the situation and gear. One of the simplest ways to break the tension and reveal your subject's true personality is to inject a little humour into the situation... and one of the best methods to accomplish this is via props. Hats, oversized thrift shop clothing, and non-prescription glasses are an easy solution here, and can progress from outright silly to sultry, depending on how you play it. Crazy things like inflatable pool toys and novelty noses are cheap, yet surprisingly effective at opening your subject up and preparing the road for more serious work once a certain level of rapport with you has been established.

Other props you may consider using can be things you have around the house already anyway: umbrellas, scarves, musical instruments, other cameras, plants, candles, wine bottles, whiskey glasses, toys, books... you name it. If it's something a model can interact with, pose next to, or it assists in creating the tone you want to project in the image, it's fair game.

So you see, you needn't spend a ton of money building 'the perfect' studio; as it's more about generating a positive environment for capturing great images than having a pristine space filled with the latest gear. In photography, as with most art, personality wins over cold precision every time. Your space should reflect you, and allow your model the freedom to be themselves within it.



# PHOTOPRENEUR

*Bruce Livingstone*

**T**oday we're joined by Bruce Livingstone; founder of iStock Photo, and new stock photography venture, Stocksy, to talk about his role in the dynamic landscape of commercial stock.

**DP:** Hi Bruce. Thanks for joining us today! Maybe you could start us off by telling us a little bit about your first business, iStock Photo... how did you formulate the idea for the business in the first place?

**Bruce:** Well, let's see. iStock Photo started from some time that I spent working at a company called Image Club Graphics. I started there when I was going to university, as a part time clerk. I wasn't a designer; I wasn't a photographer; I didn't really have that much interest in it. My job was to enter in credit card numbers manually from a terminal from the order desk. What these guys did — Image Club Graphics in Calgary, Alberta — was to aggregate supplier content... so photos, clipart, fonts etc.,

put it on CD ROM, and then they would market it by catalogue, sending out millions every month. So, orders would come in; I would enter them and get them to the shipping department; and then they would FedEx out CD ROMs and floppy disks. It was a pretty cool business in the early '90s.

Eventually, I was replaced by a piece of software (as you would think); however, the CEO really liked me and asked me to come up with a job for myself, which I thought was really cool. I was really into this, and I spent a good couple of months building a prototype of (you know, this was 1994 at the time), where you could buy a font online and download it to your desktop. I thought this was pretty amazing, and pitched it to the company. They all just sort of thought I was crazy. They were visionaries, but they couldn't see this... and I couldn't see why they couldn't see this. At the time, if you had a 28.8K modem, you were the big kid on the block; so maybe that was the reason. Regardless, I quit the next day. I was full of ideas at this time, and I went out





and I started a bunch of businesses, and wrote a couple of business plans which I got funding for this concept, which was that very model of selling photography online.

I borrowed money from the Canadian Youth Business Foundation, the Business Development Bank of Canada, the Bank of Montreal, and my father... they all helped me fund this. Over the next few years, that \$50,000 that I borrowed went quite a long ways. So I was doing design work: I had a company called Evolve Media which is one of the companies that Getty Images bought. I had a hosting company which is still around today called Webcore Labs which is pretty famous for hosting Michael Moore when nobody else would touch him after all those crazy movies that he put out that Americans didn't like so

much. So those two projects really funded out passion, which was building iStock Photo.

**DP:** Now, iStock Photo didn't start out charging for photos, did they?

**Bruce:** No, it was an image swapping site. So, in the year 2000, it was a swapping site where you would get a download every time one of your images was downloaded. Eventually we got a bill for around \$10,000 and realized it wasn't going to be sustainable, and we were going to have to start charging for it.

**DP:** You mean for bandwidth consumption?

**Bruce:** Yes, exactly. So, you know, we weren't out to lower the price of stock photography in some unreasonable way; it wasn't one of our intentions; we just wanted to build some-

thing that was cool and innovative. So we went out to the community that was formed by photographers and designers and asked them if they would support a fee for that download credit, and everybody said 'yes.' I didn't realize it at the time, but that was the beginning of the whole microstock industry.

**DP:** So you didn't feel that there was something wrong with the existing stock photography business model that you felt presented an opportunity... it was more of a serendipity kind of thing?

**Bruce:** Yeah! I didn't really consider us as some kind of competition or something to the model that was out there. Although that

was what happened, we didn't set out to democratize that closed system. That system was closed by Getty and Corbis, and it was impossible to become a photographer with them. You know they had their stable crew of photographers, and they weren't really taking anybody new unless you were just super amazing. So we created this sort of open marketplace where people could sell their creative works. I think that had more to do with the democratization than the whole model of microstock.

**DP:** I see... so you didn't initially realize your company was going to be such a disruptive force in the market — are you happy that it was?

**Bruce:** Absolutely! I just got back from the microstock expo in Berlin, and sort of real-

ized that, you know, there was like 200 and some odd people there and they were all representing different parts of the industry, and it just dawned on me how big the whole thing has become. In terms of revenue, I'm not really sure how much it is; but if you were to count both Shutterstock and iStock Photo and the rest of the guys in that space, I'm just in awe of the whole thing.

**DP:** Yes, it's enormous for sure! Now, you started iStock Photo in, what was it... 2000. This was right after the tech bubble burst, right? What were the primary challenges you faced at the outset?

**Bruce:** Yeah, we didn't feel it at all!

**DP:** Really?

**Bruce:** In fact it probably helped us more than hurt us because the prices were so cheap that there were no

issues there. So when looking for an alternative to spending \$500 on an image, you could get it for less than a dollar back then — that was a pretty special thing.

**DP:** So, you didn't have any funding issues or anything like that when you started iStock?

**Bruce:** No, there were no issues because nobody would fund us!

**DP:** Well, this is the thing: a lot of people that started businesses — particularly in the online sphere in that period between 2000 and 2001... especially after 9/11 — had significant difficulties obtaining any kind of venture capital whatsoever. So, you are essen-

**iStock.**  
by Getty Images



**DP:** Any specific things you would have done differently?

**Bruce:** You know, I wouldn't have made the model so confusing, first of all. I still don't understand how the pricing works across all the different products that they have. I would have gone with simplicity. I would have made sure that photographers were paid more in every transaction. It feels like there's a lot of margin built in there; and there's enough to go around, and

photographers deserve more for their work.

**DP:** It seems that people are being squeezed at both ends of the transaction. The prices have risen substantially, and the photographers seem to be getting diminishing revenues.

**Bruce:** Exactly — and the big thing is we don't see that reinvestment into the community. We see the site is down often and there's all these problems with search and everything else. If they were investing that money back into the community, and the infrastructure,



Saatchi Gallery - Jim Linwood

and marketing, maybe there wouldn't be such an issue... but I don't think we're seeing that.

**DP:** Well, so in 2009 you left iStock and took over the helm of Saatchi Online. For our readers who may be unfamiliar with this site, can you fill us in on what that's all about?

**Bruce:** Sure. Saatchi Online is the online version of the Saatchi Gallery in London. It was founded by Charles Saatchi who created one of the biggest and best advertising firms in the world: Saatchi and Saatchi...

two brothers, Charles and Maurice. Charles left Saatchi and Saatchi in the '80s sometime, and has lived in London ever since.

The Saatchi Gallery is the largest free-to-enter private gallery in the world....

**DP:** For physical art versus digital...

**Bruce:** Yes, and he invented the YBA's — you know, the Young British Artists, and discovered people like Damien Hirst (the shark in the tank guy), and Tracey Emin, and some



Damien Hirst - Gazanfarulla Kahn

real superstars. To this day he's got this amazing collection of art, and is world renowned for his ability to spot and promote talent.

**DP:** So, Saatchi Online is the online channel for his physical gallery.

**Bruce:** Well, yeah... it's quite separate. It's his way of crowdsourcing art and trying to sell art to buyers who wouldn't have normally discovered it.

I met Charles in 2010 through a friend in Los Angeles. We flew over to see him and Charles said "I want you to do for art what you did for photography"; and when Charles Saatchi asks you to be his partner, you don't really say no! So I did it, and it was a lot harder than I thought it would be. I don't think I was ready for the art world. It's

a whole different thing that was quite difficult. I think that Charles meant well, but he had some unrealistic ideas about paying artists 70% while eating the cost of shipping. It was a difficult model for sure.

**DP:** So you were there for a couple of years until 2012, and then you decided to embark on your latest entrepreneurial adventure, once again in the stock photography arena, with the founding of Stocksy. So what's Stocksy all about, and how is it different from iStock?

**Bruce:** Well, I'll give you a little back story. So employee number six at iStock Photo was this really special lady named Brianna Wettlaufer who was largely responsible for the creativity at the company. She kind of invented the whole idea of inspection

teams and was heavily involved in marketing in strategy there. I ended up falling in love with her and we've been partners ever since. So we were living in Los Angeles and photographers kept coming to see us, being in what was a hub city, and keeping us informed about the industry, and letting us know how frustrating it was for them. There was so much competition, and it was really hard to get a sale anymore. People who were making a decent living before, you know, \$10,000-\$15,000 a month, were, because of the royalty structure changes at iStock Photo and the competition, were having a tough time even making ends meet. So they

were saying "I've got to go back to work", "I've got to become a policeman again" or a real estate agent or whatever... begrudgingly. Because you know, they had really become used to being creatives and having a studio, and now people were dropping their studios and putting their suits back on... and weren't too happy about it.

So we kept talking about it, and we could see there was an opportunity, but the world certainly didn't need another crappy stock photography site, and we didn't want to go and flood the world with more bad pictures. So we thought, "What are we going to do, if we did something, that would make this



Stocksy Team



Shane Gross - Stocksy

special?" Why would photographers care? Why would customers care, more importantly?

So we talked at length and we called up Dan Ross who had just been let go from Time Life's Life.com. It was the company I was telling you about Evolvs Media, and they had turned that into the infrastructure for the joint venture between Getty Images and Life.com. When they canceled the project, and Dan became available, suddenly we were talking about working together again. So we came up with this concept that if we were to do it again, we should share ownership with the photographers. Photographers should be rewarded not just financially, but also, they should have the right to participation; they should have the right to profits; and the right to vote. So we

were looking at models on how we could achieve this, and it was problematic to do it in a traditional corporate structure...

DP: So it's a cooperative.

Bruce: Yeah, exactly. The cooperative isn't a perfect system, but it's a really great system for including everybody; distributing wealth; distributing ownership; and making sure that people have a right to participate. It's a really great way of creating and engaging the community and making it so that even the stock can't be raided or traded. So if the CEO gets greedy and says "I'm outta here — I'm going to sell all my stock", he can't, and everyone has sort of drag along, tag along rights. Nobody can come in and buy the thing and change the royalty struc-

ture or make any significant changes at all. In fact, nobody would want to buy this thing because our whole idea behind it is to pay out all the profits. So the company itself, although it has significant revenue, doesn't retain any of that cash, and so isn't a target for acquisition, other than maybe getting rid of the competition or something.

So by design, we wanted to make it so that nobody would want to come along and buy it because, why would you give away all that money? Why wouldn't you keep it for yourself?

**DP:** Exactly! So, what you're doing is really interesting... if I'm a photographer, how does the cooperative aspect of it function for me?

**Bruce:** We tried to keep it really simple. We only take 500 photographers a year so that we're not having too much competition in our ecosystem. We're trying to have close

one-on-one relationships with photographers, and we help people who may not have shot stock before get into that mindset of you know, releases, and taking care of all the legalities etc. We also work with photographers with regard to what the popular categories are. We provide creative research for things that are missing in the collection to different photographers who are able to shoot in different genres. We also do one-on-ones for editing, and workflow and those sorts of things as well. We really try to have this personal relationship; whereas, iStock Photo was sort of a dumping model where you have, you know, 20 million images or something like that. We don't want that. Everything on the site has to be special and aesthetically authentic. So none of that silly stock of white backgrounds and fillers, and models pretending to be



Mark Bridger - Stocksy



Matteo Columbo - Stocksy



Soren Egeberg- Stocksy

doctors and lawyers and schoolteachers etc.

**DP:** So, you only accept 500 photographers per year, how is it you go about selecting them?

**Bruce:** Well there's two ways of doing it, and it's a two stage process. You can either be invited by another photographer who's already on the site, or you can send in a blind application through what we call our 'Call to Artists', similar to art galleries out there. It takes some time, as we're rather backed up right now... we've been featured on everything from the BBC to Wired Magazine, and we're having a tough time keeping up with the demand to be honest. So, you know, for anybody hoping to get on there, it takes

some time, and we'll ask for your patience.

We go through that process as quickly as possible, and the people that we think are a fit for us, we invite. Once you have an invitation, then the application process begins where you have to send in 10 shots, and we check those for whether you have releases, quality, and metadata. So we know how much of a commitment it is for us to work with you... do you need extra help in certain places or not, and what kind of relationship we're going to have, what our commitments are going to be both ways in order to make the relationship work. Then we make a decision.

**DP:** Now, in terms of again the cooperative aspect of things, are incoming photographers required to put any funds up themselves to help support the cooperative? Or is that in equity as far as their images go... or how does that work?

**Bruce:** Well, this the really cool thing about the coop: when you are accepted as a photographer, you become a shareholder on your first day, and that transaction is only a dollar. When I look at this, the share itself brings the right of participation. It's not about value, although it does have value... it's more about the prestige of who you're going to be working with, because I really think that we have some of the best photographers in the world on our site. So, when you're accepted, you're working with the best of the best, and you're going to sell into that environment. It doesn't cost you anything other than your time investment and your participation. So I think there is

some time, and depending on what stock site you've been involved with and how big your portfolio is, there's quite a bit of time commitment in managing that transition.

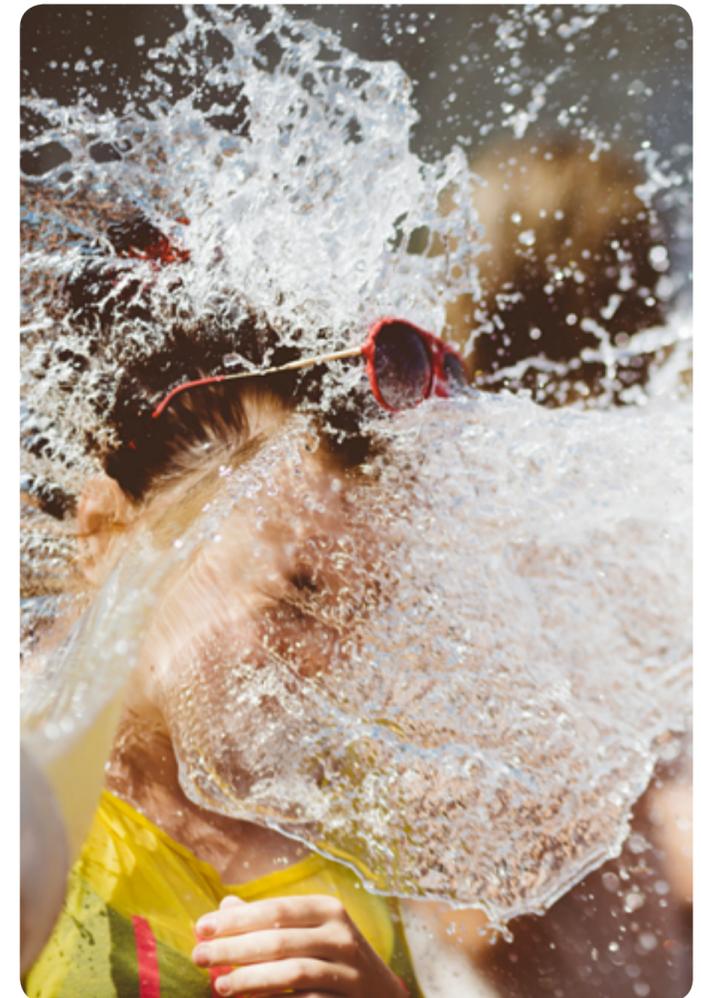
**DP:** I'm sure — now do you require your photographer's images remain exclusive to Stocksy?

**Bruce:** Everything that is on Stocksy has to be exclusive to use. So it's by shoot, and we can't have sisters [related images from the same shoot] on other sites; but we don't want to handcuff anybody. We realize that there are a number of choices out there, and we don't want to limit anybody's possibilities. So it's ok with us if you're shooting for other companies; we just want your best work on Stocksy.

**DP:** Ok. Now, your prices range anywhere from \$10-\$100; how do you go about determining the pricing for individual images. On iStock it's kind of baffling how they come up with that; but I'm kind of curious as to what your process is.

**Bruce:** Well, you know that's kind of the point. We looked at not just iStock Photo, but all the rest too. When you look at the images and try to figure out why this isolated object on white is worth \$45 while the other one right next to it is worth a dollar, and they appear to be identical, and I don't really understand the reasoning for it. I guess when you have that many millions of images it's hard to do a good job at that sort of thing, and I think it's confusing for the customer. When you couple that with things like credit packs which hide the true cost of an image... you know when you see "Oh this is 45 credits",

but you actually paid something like I don't know \$1.30 or \$1.40 per credit [the cheapest credit pack on iStock Photo at present is actually \$1.56 per credit, and that is only if you buy a pack of 3000 at \$4694 USD. For smaller projects, credits range from \$1.79 for 150 credits for the bundle price of \$268.25, to \$2.23 per credit for a pack of 10 which sells for \$22.25 (how that math works is beyond me, but that's what they advertise) — Ed] the actual cost is much higher. Your brain tells you that it's \$45, but it's actually more, and I think they're shenanigans. We don't do that sort of thing; everything is priced the same. So if you need a web sized image, it's \$10... and everything is \$10. If you want the largest size we have, it's \$100. You



Alexey Kuzma- Stocksy



Kristin Rogers - Stocksy

won't find anything that's a bait-and-switch where you find "Oh, that's actually \$400..."

**DP:** Well that was actually the next question I had: why you had chosen to go with currency-based transaction rather than credit based one. That's definitely not the norm in the industry... pretty much everyone is using credits.

**Bruce:** Well, the credit model, that was another one of my awesome inventions. I won't take credit for actually inventing 'the credit', but in this microstock case, the credit was made because we were charging \$0.25 per image, and you can't charge a credit card \$0.25 because of the fees that are involved. After fees, if you were to charge

\$0.25, you might end up with \$0.06, so you can't really share that with the photographer... it just doesn't work. So we decided that we would have different levels of credit packages where you could buy 10 for \$10 and as it went up, we'd give tiny discounts.

That was the idea behind it; it was sort of a short term commitment to us, and if you committed to us a little longer, we gave you a little discount. It wasn't meant to be turned into a currency; it wasn't meant to disguise the true price of a photograph.

**DP:** That seems to be kind of what it evolved into, especially with the expiration of credits... it was almost like a gift card kind of deal.



Zoran Djekic - Stocksy



**Bruce:** Oh yeah. That was a brilliant move by the accounting department that really upset customers across the board; and I guess it's still common practice. It's kind of a cheeky way for accounting departments to realize revenue; otherwise those credits just sat there in limbo for years and years and they could never actually take it as revenue.

**DP:** I see. So, back to Stocksy, what's the typical type of client you are shooting for?

**Bruce:** You know, we have everybody from really cool small design firms who have discovered us through friends, or they're friends of the photographer or something like that, all the way to huge agencies. It was really surprising to me when BBDO called and said "We love your images; all our designers are talking about you; we really want to work with you". You would think that the big companies would be the last to adopt something that's kind of new and innovative, but it proved me wrong, and that just keeps happening. People are finding us and raving about it; and that's in no small part a result of my wife's vision for the visual aesthetic — that's all her idea — I wish I could say it was mine, but it's not!

My job is to talk to the press, bankers, VCs, go to award shows, attract really good talent, and I also do finance and legal things, but there's a lot of people here doing a lot of hard work and it seems like I am always taking the credit. So I want to make sure the folks here get their moment of glory as well, because they are behind the scenes doing all the real important work.

**DP:** Well no doubt! You say the reception in the marketplace has been positive thus far, so what do you see the company into, let's say maybe 5 years from now?

**Bruce:** Well, that's a tricky one. We're not really planning that far ahead. We're looking maybe a year ahead now, and we just this month will start seeing a positive balance. We're seeing profitability after only 8 months, which is totally unheard of in this space or any other space — to be in the black that quickly. So, it's growing a little quicker than I had anticipated, and I think we want to just keep growing at a really sustainable rate. I think, you know, sort of that whole Moore's Law thing... I don't think that people will really adopt the style and the visual aesthetic for at least another couple of years. So I would think that in the next 24 months, we're going to see that. We've just seen the beginning of our 816 growth — even though I've been really impressed with it — I think we're going to see that 'hockey stick' growth over the next 24 months here. After that, I don't know... diversification, localization, all those things that you do as your company becomes a little more mature.

**DP:** Now, in terms of volume, it's difficult to manage a cooperative structure as it scales; are you looking at replicating the model under different umbrellas, or is that something you've considered?

**Bruce:** I'm not really sure. Stocksy is really good at doing one thing. I think that when a company starts getting into things that is not their expertise, they start to falter a bit. If



we were to get into video training or something like that... it's not what we do. So we want to focus our expertise and make sure we are doing the best job that we can on just the one thing right now. We're not looking ahead and saying "Oh we want to do video" or something like that, because it's not on our radar, and I think that in that space right now there's a lot up for grabs right now, and I don't think that we could do it justice; I don't think that we would do it right for videographers; and I don't think that our customers would do well either. You know, there's already some people in the space that are doing an amazing job, so why would you go up against them and try to eat their lunch when they're already doing really well? So unless there's some thing there where we see an opportunity... I don't really

see one right now, to be honest. People are asking me "Are you going to go into Editorial?" and I keep saying "No, I just want to make one really cool thing right now, and make it the best thing we can make it."

**DP:** Well that's great! Now you're a photographer yourself right?

**Bruce:** Yeah, I try to be a good photographer, I have some files on Stocksy.

**DP:** So what got you started in that field? I know you mentioned at the outset that you were not really in the creative space; so how did you get into it?

**Bruce:** Well, my mother was a photographer, and so how I got iStock Photo off the ground was combining her photography with my blossoming passion for photography. So I scanned, I don't know, probably

2000 of her old slides and negatives... so there are all these really great vintage shots on the original iStock Photo of farmers and cityscapes; kids at birthday parties and things like that. Of course, my work was more commercial — mostly shot on film and scanned and processed afterwards. So, yeah I was taught by a few people in the field how to take pictures back in 1998 when I got really serious. My father was one of those people that taught me as well.

**DP:** So, being a photographer, and being in the industry on the stock end of things, what do you think of the state of the photography industry today?

**Bruce:** Um, I wouldn't want to be dependent on it for my income, that's for sure. I think that it's fragmented; I think that people are

confused, disenfranchised, and don't know how to make a living at this business anymore. There are more photographers than ever. You know at one point I really was into concert photography, and my really good friend Leo Nitzberg at Golden Voice was kind enough to get me in and get me press passes to all the Coachellas; and it was unbelievable... there were so many photographers there! So that quickly ended that whole idea of being a concert photographer. I loved it, but I don't know how anybody could make a living at it; I don't know who would license those pictures in the first place... but there's just so many pictures, that I don't know why anybody, other than for just pure enjoyment would try to do that. Maybe that's the thing: if you're a photographer today, you have to really love what you're doing



and shoot what you want, and maybe that's how you'll make a living, because you're doing something from the depths of your creative soul. Instead of focusing on the dollar, you're focusing on your creativity.

**DP:** Ok, so on the business side of things, when one considers their potential career, clearly not everyone is suited to being an entrepreneur... obviously, you've been successful, so what personal qualities do you think are required, and serve people best in this regard? Things that have helped you perhaps...

**Bruce:** Well, I think my parents taught me at a very young age not to be scared of anything; and that anything was possible. You had to have this belief in yourself that was almost maniacal; you could accomplish anything. Even though you grew up in the suburbs of Calgary, you could still do anything that you set your mind to; and I think I grew up believing that. I grew up thinking that it doesn't matter where you came from; it only matters where you are going, and how much you believe you can actually accomplish it.

So I guess that determination is probably the biggest thing: that motivation to succeed at whatever you set your mind to. I've never really been scared of anything my entire life... not being scared to fail.

You know what we really haven't talked about is that I've started maybe 15 businesses over the last 20-25 years, and I think 4 of those have been successful. So I've had a lot of failures along the way, and a lot of those are really heartbreaking.

**DP:** Well, I'm sure! So based on your experience with these failures, and hopefully to avoid some of the pitfalls you've encountered along the way, what advice would you give a young creative person with a good mind and an entrepreneurial spirit who is just starting out today?

**Bruce:** I would say that you need to be true to yourself; and that it's more important to make something meaningful than it is to make money. That if you always choose to do the right thing instead of the most financially responsible thing, then those are always good choices. You have to listen to your gut and to your heart and trust that that's a proper way to make a decision: from passion.

Probably the biggest thing that I've learned over the years now — and I wasn't always good at this — was how to listen to people. That's got to be the biggest thing that helped my career, and probably the secret to my success: being able to genuinely listen to what people are telling you, and see the legitimacy in it.

**DP:** Well that's some solid advice Bruce! I want to thank you for taking the time to chat with us today; and I'm sure our readers will be very interested in checking out your latest venture, Stocksy.

So on behalf of DarkroomPro, I want to wish you the best of success in the coming years!

**DarkroomPro**  
M A G A Z I N E



# Compose Yourself.

## LEARNING LANDSCAPE

It's a common conundrum: you've just immersed yourself within the luxuriant beauty of a pristine forest, or been rendered awe-struck upon witnessing the majesty of a mountain range, or perhaps you've stumbled upon a serene lake at sunset... you grab your camera in an effort to capture the moment for all time... upon arrival home however, you fire up the computer only to discover your images are ho-hum, pedestrian snapshots which do little to represent the incredible vistas you experienced earlier that day. Why is that?

Contrary to what many believe, creating good landscape imagery is not easy. You can't simply point your camera at what you

initially feel is an attractive scene, depress the shutter and expect to achieve great results. The way your eyes perceive landscapes is actually different than how your sensor will capture them. The human brain tends to filter out extraneous information and allows you to focus on the most important elements in a scene — your camera isn't quite so smart! So how do you ensure your photographs do justice to the gorgeous scenery you find yourself in? Read on!

## THE THREE 'P'S

While creating great images of people can often rely on spontaneity and quick reflexes in order to capture fleeting ex-

pressions and interesting motion, landscape photography is more about patience, persistence, and preparedness.

The first order of business when planning a landscape shoot is to thoroughly scout the intended location in advance. This is best done in the late morning or afternoon and will enable you to maximize the time you are able to shoot in the 'golden hours' of the day: the hour before dusk and after dawn when sunlight exhibits its most magical qualities. Examine how the light falls in the scene; what position will the sun be in at the time you intend to shoot? How will the shadowed areas appear? Will you have dynamic range issues?

Ensure you are aware of all the subtle characteristics of your location well in advance

of your shoot and you'll be in a good position to capture it at its best when the light is right. Thorough scouting also enables you to discover vantage points and subjects you mightn't have otherwise, and will afford your images the distinctive quality you are looking for — after all, who wants to produce the same hackneyed snapshots as everyone else who has visited this spot? Once you've selected your shooting locations, it's all about being patient and waiting for just the right light, cloud, water conditions etc. Very few great landscape shots are a product of happenstance! Often you'll need to return to the location over days... or months, in order to obtain the best possible photographic results from it.

One note on safety however: before you





venture out to scout your shoot, ensure you've prepared adequately for whatever conditions you might find yourself in. This means environment appropriate clothing, food and water, matches, rain gear... whatever the worst case situation could possibly demand. Additionally, be certain to inform someone of your intended destination, as well as when you are scheduled to return. Speaking of gear, the successful landscape photographer does have some specialized equipment requirements. You'll be needing both a wide angle and telephoto lens, as well as a compliment of filters, and a solid tripod. While using a wide angle would seem obvious for shooting landscapes, frequently the employment of your long lenses will serve you better depending on the subject matter. For

example, while a wide angle might produce an amazing effect when shooting a soaring oak from below, a stand of them might be better captured using a telephoto given its ability to compress the scene within frame.

As far as filters go, there are a couple that really make a huge difference in your images — the first being a circular polarizer. This filter enables the photographer to minimize reflections on water, deepen sky and cloud contrast, reduce haze, make rainbows pop, and is an essential tool for anyone serious about shooting landscapes.

Next up, the graduated neutral density filter allows you to capture scenes with high dynamic range without having to resort to HDR composites in post. These filters feature a clear portion which gradually darken

to typically between 1 and 3 stops (which is actually how they are categorized e.g. '2 stop graduated ND filter'). While these filters have fallen out of fashion somewhat with the advent of the aforementioned HDR compositing, we feel there's no substitute for accurately capturing the scene within a single frame, and being certain of your results — which is next to impossible with HDR.

For more information on filters, check out the Filter Fundamentals article in this issue! - Ed.

## CORE CONCEPTS

While traditional rules of composition certainly apply to landscape photography, there are a number of additional things to bear in mind when framing your shot. First, be sure to thoroughly examine everything in your

viewfinder before depressing the shutter release. Nothing ruins a great subject more than a bunch of extraneous crap surrounding it. Are there power lines, garbage cans, hydrants or any other foreign objects in-frame? Recompose. Do your best to eliminate clutter from your composition so that your audience is going to appropriately perceive the subject's importance within the image. This can be done by reframing or utilizing depth of field. While landscape photographers most frequently utilize smaller apertures to maximize depth of field (i.e. higher f stop numbers), you may find on occasion it is desirable to employ shallow DOF in order to highlight your subject, and turn distracting background elements into an attractive blur.

Certainly selecting a worthy subject in the





first place is important; however, in landscape photography which employs a large depth of field, you generally should be thinking about three. When setting up a shot, you need to divide your composition mentally into foreground, mid-ground, and background, and look for interesting features to highlight in each. Otherwise you have a photograph full of unimportant elements which do little to support the subject. Further, the idea is to lead your viewer's eye through the image to arrive at points of interest within it. This may be accomplished by using leading lines composed of rocks, fences, roads, rivers, ripples in sand — anything that serves to propel the eye through the three regions. Note, one leading line element can lead to another however; you don't need to have one going through the entire image.

If you are shooting grand, sweeping vistas like prairies or mountains for instance, it's often a great idea to introduce a sense of scale. This can be done by including an element with which everyone is familiar, and therefore serves to inform as to the relative size of everything else in the composition. This can be a person, an animal, a bicycle, a fence... preferably something that doesn't detract from the mood of the image and acts to enhance the story. A sole human within a vast expanse definitely conveys a sense of scale and can inject a variety of emotions into the composition: loneliness, longing, adventure, fear, serenity, etc. — all depending on the context of the other elements in-frame. Finally, here are some tips on dealing with common landscape situations...

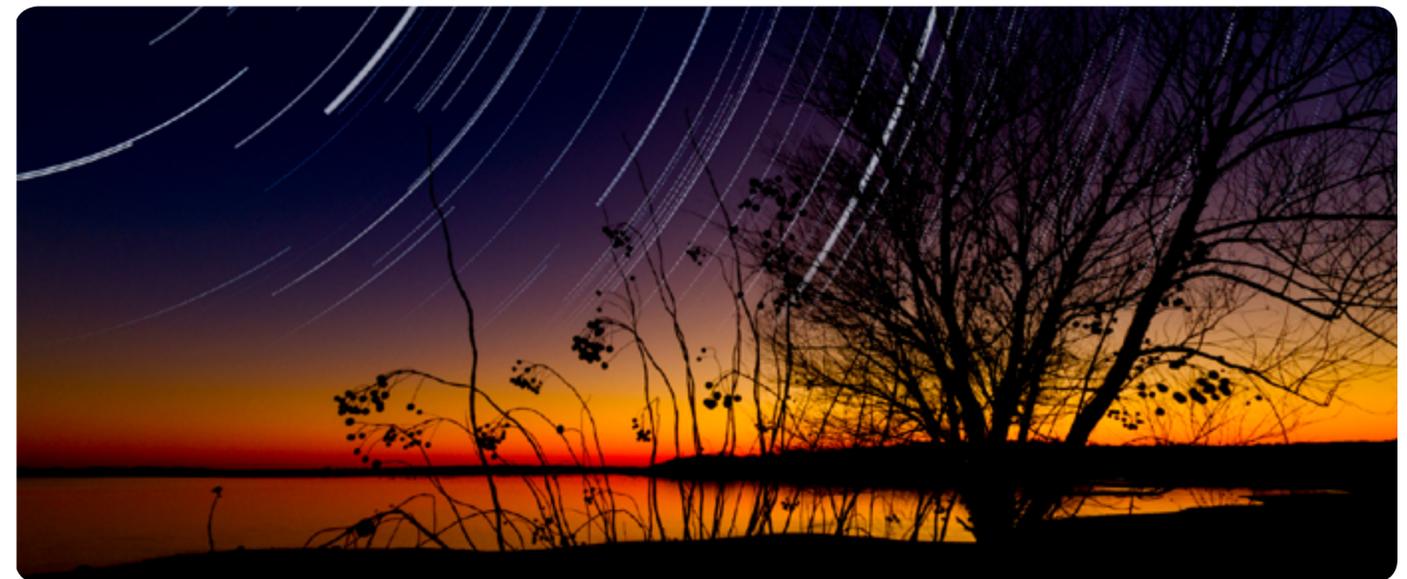
When framing the sky in your shot, decide whether it is a major focal point, and if so, give it space! Consider using the rule of thirds to divide your image in such a manner as to allot two thirds to it. Should it be less important, one third will suffice. This is particularly important in plains and prairie shots... if you're in 'Big Sky Country', don't sell it short! Further, don't shy away from putting the sun in the shot. Stop down and meter for the scene without its inclusion, then recompose and snap away. Watch for flare however, particularly with wide angle lenses.

With water you really want to capture its characteristics based on context. For instance, are you shooting waves crashing on rocks? Then your shutter speed should be 1/250th or above to freeze the spray and provide a sense of the ocean's inherent power. On the other hand, are you photographing a serene waterfall or babbling brook? To get that milky smooth look, you'll want to experiment with speeds of between 1/15 and 1 second, depending on the water's rate of flow.

Find yourself in the desert? Try using a

telephoto lens to capture heat waves coming off the sand, rocks, or road. The compression afforded by these lenses adds definition to these elusive effects. Further, the desert is an excellent place to practice celestial photography at night given the lack of humidity. While the techniques to do it properly are beyond the scope of this article (and indeed the subject of a planned effort in future!), try centring your camera on Polaris (should you be in the northern hemisphere) and with a very long exposure (hours), capture the stars as they wheel about it. The results can be breathtaking.

Always use a tripod if possible! Not only does this provide the stability required for longer exposures, but forces you to slow down and really consider what it is you are trying to capture. A cable release is also a great item to have with you to ensure you are introducing as little vibration into your shot as possible. This isn't sports... be patient; take your time and enjoy the wonder of nature around you!



# FILTER FUNDAMENTALS

With the ubiquity of software based image editing tools — both on the desktop and in our mobile phones — one might be forgiven for thinking the best time to apply a filter is in post; and indeed, many believe that's their only choice. However, often your best course of action is to employ a hardware filter at the point of capture; and your options here are nearly as numerous as those available in the software realm. Yet, while this is certainly the case, there are only a few key filters a photographer definitely needs to add to his kit...

## BUT FIRST

Before we get into a discussion regarding which filters you need, let's cover one you likely don't: the UV. A favourite add-on item of photographic equipment vendors everywhere, the UV, or Ultraviolet filter, is definitely better at padding their pock-

ets than providing any utility to photographers. They'll caution you strongly as to the dangers of leaving your expensive new lens unprotected, and nudge one of these babies on the countertop toward you, admonishing you to leave it permanently affixed. Let's explore this notion, shall we?

First, why on earth would you want to put some cheap piece of glass in front of your expensive lens elements? Not only will it degrade your picture quality, potentially be the source of vignetting, flare, and colour casts, but can also on occasion cause reflections to appear in your images. So you're going to be happy with crappier photos for the sake of protecting your lens? Why did you buy an expensive lens in the first place?! But hey, maybe you're one of those folks that still retains the plastic on their sofa...

If you want to protect your lens, buy insurance and use a hood, which is not only helpful in warding off objects that might interact with your front element, but improves con-

trast and reduces flare. Further, UV filters are really only effective when using film, as digital sensors aren't particularly sensitive to ultraviolet rays. The only time you really might want to use one of these (or a cheaper 'protect' clear glass filter), would be if you were shooting in an extreme environment such as the desert on a windy day. Don't find yourself there often? Don't bother with a UV filter.

## NOTES ON USE

Just a couple of pointers before you get started with filters are in order. First, when affixing one to your lens, ensure there is no grit in the threads of either device.

Clean gear can last a lifetime; while just a little carelessness can cost you a great deal of money. When using filters that come with adjustable front elements, ensure you are turning them in the same direction as you tighten on your lens in the first place. You may be in for a rude awakening indeed should you ignore this advice, as they can easily come off otherwise — and the last thing you need is a smashed or lost filter. Further, when attaching a filter or adjusting its element, you may discover you have inadvertently altered your focal length. A good practice to prevent this is to keep a finger on your zoom ring while adjusting the filter with your other hand. Finally, sometimes filter effects can be quite subtle through the viewfinder, and it is often helpful to utilize the depth-of-field preview button to see its full impact.

Ok, now with that out of the way, on with the show!

## CIRCULAR POLARIZER

One of the most useful filters you can obtain has to be the circular polarizer. This add-on works by blocking the chaotic light bouncing around from reflective surfaces etc. and enables the photographer to achieve images which, without its application would be completely impossible. For example, should one wish to capture subjects beneath a body of water on a sunny day, you would find it extremely difficult due to the reflective properties of the water's surface.

Further, a circular polarizer is used to deepen blue skies, remove haze, add contrast, maximize saturation, and may be also used in a variety of other creative ways.

One thing to note however, you should ensure you pick up a circular polarizer rather than one of the linear variety (which, interestingly enough, the circular models also incorporate as an element of their manufacture), as, should you have a modern camera, you'll likely experience auto-focus issues with the application of the latter.

So how do you best employ this device? Well, when you are shooting in a situation that calls for its utilization, your polarizer will have its maximum impact should you position the filter at a 90° angle to the light source — typically the sun. Then rotate the outer ring until you see the desired effect in



the viewfinder. Often the results can be quite dramatic, though you'll want a bright viewfinder for this, as on other occasions they are subtle, depending on the amount of light being influenced and the angle to its source.

Cameras which have a depth-of-field preview function may find this feature's utility diminished at higher f-stops when using a circular polarizer, as the viewfinder may be too dark to discern much detail. Further, you'll typically want to forego its utilization in situations where you have to move quickly to capture your subject, as to achieve the desired effect, time must be taken to adjust the filter's rotation. Finally, bear in mind you'll often be losing a few stops of light with its application, so you'll need to take this into account by slowing shutter speed, widening the aperture, or increasing your ISO appropriately. (read 'The Three Kings' article in Volume I for more information on this! — ed.)

## GRADUATED ND

A boon to landscape photographers everywhere, the graduated neutral density filter is designed with a clear glass portion which gradually darkens to the point of its designation, e.g. 2 stop, 3 stop etc. This is extremely useful in darkening skies in order that you might push the rest of the image further to the right of the histogram, which enables the photographer to capture more detail, given the upper range of your camera's sensor records more data than its opposite.

Another scenario in which this filter is best employed would be one wherein the Ev range of the scene exceeds the camera's dy-

amic range (quite common with DSLRs when used outside), requiring the photographer to make a decision as to which end of the spectrum he wishes to capture, while allowing the other to blow out: retaining no recoverable data in either the highlights or shadows, depending on which they selected to favour. The ND grad will compress the dynamic range in this situation, enabling capture of all elements within the scene — something that cannot be done after the fact with levels adjustments in software.

Beyond their stop designation, there are two types of graduated neutral density filters: screw-in, and their adjustable cousins which require a mount and allows for greater latitude in transition positioning. While the latter option allows for a greater degree of control (always desirable), the former is far less of a pain to use. If I know I am going to be doing dedicated landscape shooting and expect to encounter a wide dynamic range, I'll be bringing along my tripod and adjustable ND grad filters; however, for those occasions where I just happen to find myself in an HDR situation... particularly should I have no tripod, I reach for my screw-in, which I always have handy.

This month, Tiffen sent us an evaluation copy of their 2 stop screw-in 77mm filter which features a proprietary HT coating designed to provide scratch resistance and optical clarity, and a titanium ring for increased strength and vignetting reduction. We have to say that for convenience and functionality, we've seldom come across a more worthwhile gadget to stow in our

bags. The 2 stop designation (0.6) with a smooth transition works well for natural looking skies; the coating renders images with no adverse colouration; and its robust construction will ensure you're still using it for years to come. Check out the images we shot while employing it as compared to those without, and I'm certain you'll agree that for around \$139.95 USD retail, this handy little filter is well worth the investment.

## NEUTRAL DENSITY

Finally, though not as essential to everyone's photographic needs, a straight neutral density filter simply reduces the overall light from a scene by the amount of stops they are rated at. Particularly useful for long exposures, they enable the photographer to capture amazing images without risking blowing out highlights. You'll often see these implemented in support of rendering

water's motion as a silky smooth blur while the rest of the scene remains in sharp relief. Frequently of significantly higher stop reduction rating than their graduated siblings (often as high as 10 stops! (3.0)), NDs are certainly more specialized in nature, but an essential part of the dedicated landscape photographer's kit. These filters may be used on their own, or indeed stacked with others, such as the graduated neutral density, to obtain the perfect capture.

So, instead of trying to achieve the effects of filters via software in post — some of which being impossible, such as those created with polarizing filters — why not accurately shoot what your eye perceives in the first place? For the investment of a little money and with a commensurate amount of practice, you'll reap the reward of dramatically improved imagery, and open up new creative possibilities which would otherwise be unavailable.

