

YOUR SOURCE FOR CANADIAN PHOTOGRAPHY

PHOTO

VOLUME 27, NO.1 / SPRING 2018 / \$6.98

NEWS

PORTFOLIO: RANDY VANDERSTARREN

Take Your Seat

TONY BECK
Tips for Spring Wildlife Photos

MICHELLE VALBERG
On the Path of Magic

PLUS:

WAYNE LYNCH
Vancouver Island Adventure

DANIEL DUPONT
Macro Technique

MICHEL ROY
The Magic of Shooting RAW

AND MORE!

» **SPECIAL
MACRO PHOTOGRAPHY**

COMPLIMENTARY ISSUE • FREE COPY

FUJIFILM
X

CAMERAS WITH CHARISMA



Dialed Into Photography

Like traditional film cameras, FUJIFILM's manual controls allow you to FEEL in full control.

You will know which functions are selected without having to scroll through multiple menus ensuring no moments are missed.

One of many features that feeds the passion of our FUJIFILM X Community

LEARN MORE AT: www.fujifilm.ca

FUJIFILM, X Series and the X Series icon are trademarks of FUJIFILM Corporation and its affiliates.
Copyright 2018 FUJIFILM Corporation. All Rights Reserved.



FOCAL POINT

BY NORM ROSEN, EDITOR | editor@PHOTONews.ca

Spring Photo Projects

Join the conversation!



facebook.com/PhotoNewsCanada



twitter.com/PHOTONewsCanada



Tune in to our YouTube Channel: [PHOTONews TV](https://www.youtube.com/channel/UC...)

Visit the website at www.photonews.ca

Join the flickr® group at www.flickr.com/groups/photonewsgallery/

Questions or comments? Please send me an e-mail at editor@zakmedia.ca

Now that the chill of winter has faded, photographers across Canada can shift their focus from the cool images of snow and ice to the first signs of spring. At PHOTONews, we have been very busy preparing a series of photo projects that will inspire you to create some spectacular pictures using techniques that are guaranteed to impress your friends and family.

Our adventure begins with a visit from Randy VanDerStarren, a Toronto photographer who took a simple concept and transformed it into a world-wide photo assignment. Tired of looking for a point of interest in landscape images, Randy decided to bring his own focal point—a single folding chair—to some of the most iconic settings across Canada. Response was so enthusiastic that he expanded the project to encompass the world. Check out the portfolio section beginning on page 28, and imagine how you can emulate this concept to create your own signature edition landscapes!

Globetrotting readers will enjoy two very special travel features in this issue, as we join Dr. Wayne Lynch on a sea kayak tour of the coastal waters of Vancouver Island, and follow award-winning travel photographer Michael DeFreitas on a journey to the Promised Land.

With the coming of spring, many photo enthusiasts turn their attention to close-up and macro photography. We asked Daniel Dupont to explain the basic techniques, and expanded the subject with two features by Will Prentice—one on macro lighting, and the other on selecting interesting macro subjects... Will focused on close-up views of bicycle technology—imagine how many close-up and macro subjects you might have in your own environment!

We completed the special macro elements of this issue with Kristian Bogner's technique feature on Focus Shift and Focus Stacking—a method that utilizes state-of-the-art camera and computer technology to bring incredible sharpness to the photographic process.

Wildlife photographers will thrill to the images that Michelle Valberg captured during her recent adventure in B.C.'s Khutzeymateen Grizzly Bear Sanctuary and the Great Bear Rainforest. Closer to home, Tony Beck focused on techniques for spring wildlife photography, with an technique feature geared for new and aspiring nature enthusiasts.

All this, and more, in an issue that we hope will inform, entertain, and inspire you to pick up your camera and create some of the best photos of your life.

If this is your first encounter with PHOTONews, we thank you for sharing your leisure time with us, and we invite you to join our growing family of subscribers—PHOTONews is available FREE of charge to Canadian photographers, thanks to the support of our advertisers, and we have an on-line archive of previous issues available FREE of charge at the website, www.photonews.ca. Please take a few minutes to visit the website for a wide range of articles and links to PHOTONews multi-media content.

PHOTONews

Volume 27, Number 1 / Spring 2018

ON THE COVER:

Dusk in Group of Seven country, Carden Cove, Marathon Ontario, North Shore of Lake Superior. Nikon D750, 20mm, f/6, 6.0 seconds, ISO 250.
Photo by Randy VanDerStarren

PUBLISHER

Jacques Dumont jdumont@zakmedia.ca

EDITOR

Norm Rosen editor@zakmedia.ca

GRAPHIC DESIGN

Jean-Denis Boillat info@komconcept.com

PHOTO EDITOR

André Dal Pont

CONTRIBUTING WRITERS/PHOTOGRAPHERS

Dr. Wayne Lynch, Kristian Bogner, Michelle Valberg, Michel Roy, Michael DeFreitas, Tony Beck, David Librach, Daniel Dupont, Will Prentice, Randy VanDerStarren, Francis Audet, Steve Makris.

ADVERTISING

adsales@zakmedia.ca

© 2018 PHOTONews Magazine, Zak Media
Printed in Canada • ISSN 1185-3875

Canada Post Publications Mail Agreement No. 40040669

Undeliverables to:

PHOTONews Magazine
22 Telson Road, Markham, ON L3R 1E5

PHOTONews is published four times per year (Spring, Summer, Autumn, Winter) by Zak Media, and distributed to imaging and adventure enthusiasts throughout Canada.

All rights reserved. Reproduction of any material appearing in this magazine in any form is forbidden without prior consent of the publisher.

SUBSCRIPTIONS – Address change

Visit www.photonews.ca or contact :
PHOTO News Magazine
22 Telson Road • Markham, ON L3R 1E5

Subscription rates:

FREE for photographers in Canada – available at photo retail shops throughout Canada, and by mail – please see the subscription page at www.photonews.ca for FREE subscription information.

U.S. and international readers are invited to read the magazine on-line at www.photonews.ca where you may enjoy FREE access to the digital edition archives.



Published by



Zak Media

189 Alfred-Desrochers
Saint-Augustin, QC, Canada G3A 2T1
Tel: 418 871 4294 • Fax: 418 871 4295

www.zakmedia.ca

FUJIFILM GFX MEDIUM FORMAT

THE GAME HAS CHANGED.
MEDIUM FORMAT RE-INVENTED.



COVERING ALL ANGLES

Getting the right angle to capture the essence of your subject is crucial. The FUJIFILM GFX 50S has you covered with a large rear touchscreen LCD that tilts in three directions. Ideal for portrait orientation and shooting from waist level. Add the optional EVF Tilt Adapter to shoot while using the viewfinder and increase your freedom of camera positions. With the GFX 50S, all your angles are covered.



Photo by X-Photographer Patrick La Roque

LEARN MORE AT: www.fujifilm.ca/gfx

FUJIFILM, GFX Series and the GFX icon are trademarks of FUJIFILM Corporation and its affiliates.

©2018 FUJIFILM Corporation. All Rights Reserved.

Contents

28

PORTFOLIO:
Randy VanDerStarren

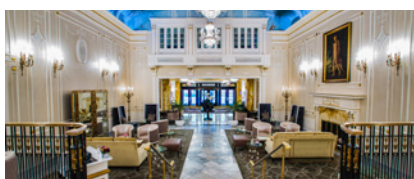
Take Your Seat!

Havana Cuba remains wonderfully content in the 1950's but for how much longer?
Nikon D750, 18mm, f/8, 1/250 second, ISO 400.

Photo by Randy VanDerStarren

18

MICHEL ROY



The Magic of Shooting Raw

22

WAYNE LYNCH - DESTINATIONS



Vancouver Island Kayak Adventure

34

SHOOTING TIPS



Michael DeFreitas –
Israel: Land of Surprises

TECHNIQUE

Francis Audet - Go Wide!

38

TECHNIQUE

Steve Makris - Sunrise, Sunset

40

TECHNIQUE

Daniel Dupont - Macro Photography

42

CANADIAN ANGLES

Michelle Valberg -
Discovering Northern B.C.

46

PERSPECTIVES

Kristian Bogner - Focus Stacking
with Focus Shift

50

IN THE FIELD

Tony Beck – Spring into Nature
and Wildlife Photography!

54

FLASH 101

Will Prentice - Illuminating
the Macro World

58



ALTA PRO 2+

ALTA FLY

© Jay P. Morgan



ALTA COLLECTION

INTRODUCING A NEW COLLECTION OF TRIPODS, CAMERA BAGS, AND HEADS

Inspired by feedback from photographers from around the world, the Alta Collection reaches a new level of innovation and versatility. This distinctive collection is like nothing we've ever made.



Tripods



Bags



Heads



reddot design award
winner 2017



ALTA PRO 2+

ALTA PRO 2 | ALTA SKY | ALTA FLY | ALTA RISE | ALTA ACTION



www.vanguardworld.ca



Tamron Launches New 70-210mm F/4 Di VC USD (Model A034)

Tamron has unveiled a new full-frame F/4 telephoto zoom lens with excellent optical performance in a lightweight and compact body. The lens will be available in Nikon and Canon mounts.



The new internal zoom lens has been designed to deliver superb optical performance throughout the zoom range, with a maximum magnification ratio of 1:3.1, the highest in its class among 70-200mm F/4 class interchangeable lenses for full-frame DSLR cameras. The optical construction of the new lens (20 elements in 14 groups) includes three LD (Low Dispersion) lens elements to compensate for axial and transverse chromatic aberrations, ensuring crisp and crystal clear image quality across the entire frame.

With solid mechanical construction and stable, reliable operation, the lens uses Tamron's Dual MPU (Micro-Processing Unit) and USD (Ultrasonic Silent Drive) ring-type ultrasonic motor to enable high-speed and high-accuracy AF performance as well as Tamron's proprietary VC (Vibration Compensation) 4-stop image stabilization. Full-time Manual Focus override mechanism lets you shoot with AF, and instantly make fine manual focusing adjustments without switching the AF-MF mode switch.

The new lens features front element Fluorine Coating and Moisture-Resistant Construction. For additional versatility, the 70-210mm F/4

Di VC USD is compatible with Tamron's TC-X14 1.4X and TC-X20 2X teleconverters, and Tamron's optional TAP-in Console™, a USB connection that lets you plug the lens into a computer to update the lens firmware and customize features, including fine-tuning the auto focus and vibration control settings.

For the ultimate in zoom lens versatility, the new lens can be outfitted with an optional tripod mount, compatible with Arca-Swiss style quick release plates.

For more information please visit www.tamron.ca



**CANADIAN
IMAGING** 2018
CONFERENCE & EXPO
By the Professional Photographers of Canada

GET INSPIRED AT THE
Canadian Imaging Conference and Expo
MAY 4 - 9, 2018
in Richmond BC!



For more information, please visit:
www.canadianimaging.org

Speaker Lineup: JB Sallee, Nikki Harrison,
Kaylee Greer, Dave Brosha and many more..!



New Tamron Full-Frame Zoom for E-Mount

Tamron has announced the new 28-75mm F/2.8 Di III RXD (Model A036)—a high-speed standard zoom lens for Sony E-mount (35mm full-frame) mirrorless cameras.

The new "next generation" lens has been designed to deliver outstanding image quality and beautiful bokeh thanks to the f/2.8 aperture. Compact and lightweight, weighing only 550g and measuring just 117.8mm, the lens has a minimum focus distance of just 19cm at the wide angle zoom setting, and just 39cm at the telephoto position. The lens features Tamron's new RXD (Rapid eXtra-silent stepping Drive) AF system for high speed and precise focus. This new AF system is

remarkably quiet, a major advantage for video assignments.

With moisture resistant construction and hydrophobic Fluorine Coating to resist fingerprints and debris, this is a very versatile zoom lens. Designed to be compatible with the "Direct Manual Focus (DMF)" system feature of Sony cameras, that lets the photographer switch instantly between manual and auto focus.

Tamron 28-75mm F/2.8 Di III RXD (Model A036)



STEP UP FROM THE ORDINARY.

"When my vision needs to be translated to print, Gold Fibre Silk meets and exceeds my expectations. I love the fact that my fine art inkjet prints look like I have spent hours in a darkroom. The tonal range is outstanding."

James Simmons

*ILFORD
Masters*



**ILFORD
GALERIE**
PROFESSIONAL INKJET PHOTO RANGE
WWW.ILFORDGALERIE.CA



Two new Laowa lenses See the world from a new

Laowa 9mm f/2.8 Zero D

Laowa has just announced a new manual-focus 9mm f/2.8 Zero D lens for APS-C camera systems.

Ideal for landscape, architecture, and astro photography, this new lens features

close to zero distortion, rendering the straight lines in your extreme wide angle images virtually unaffected by the 113° angle of view.

This lens is the widest f/2.8 lens currently available, and even though it has 15 elements in 10 groups, it is one of the lightest and most compact lenses in the category, at just 215g. Minimum focus distance of just 12cm opens a new world of close-up wide angle imagery. The lens measures just 52mm long (including mount) and has a 52mm outside diameter (49mm filter thread).

The 9mm f/2.8 Zero D lens is available in dedicated mounts for Fuji X, Sony E, and Canon EF-M cameras.



Capture a different world



Superb manual focus lenses available in Canon, Nikon, Pentax, Sony, Fuji X and Micro 4/3 mounts

LAOWA
www.laowalenses.ca

perspective with Laowa!

Laowa 25mm f/2.8 2.5-5X Ultra Macro

Joining the new 9mm wide-angle lens is the new Laowa 25mm f/2.8 2.5-5X ULTRA MACRO, a full frame macro lens available in Canon EF, Nikon AI, Pentax K, and Sony FE mount models.

This exciting new lens has been designed specifically for macro photography, with a 173mm mini-

mum focusing distance and a 2.5X to 5X magnification range. Laowa engineers have incorporated specialized optical structure to achieve a 40mm (5X)–45mm (2.5X) working distance, which allows close-up and macro photographers to utilize a greater range of lighting setups.

The lens features a multi-layer coating to reduce ghosting and flare, and the all-metal barrel construction is strong and durable. The lens's optical formula includes 8 elements in 6 groups, with an 8-blade aperture. Maximum aperture is f/2.8, minimum aperture is f/16, and angle of view is 10.3°.

As a specialized manual-focus macro lens, the Laowa 25mm f/2.8 Ultra Macro does not offer infinity focus.

For more information please visit www.laowalenses.ca



©Will Prentice

REAL Images, REALPRO Filters

REALPRO Filters with ASC anti-stain coating are made in Japan to Kenko's highest standards. Using the best quality glass for maximum light transmission, the knurled edge easy-grip filters feature SLIM Black Almite frames and black rimmed glass to eliminate unwanted flare, vignetting and ghosting.

Choose Quality, Choose Kenko REALPRO.

www.kenko-global.ca | Made in Japan



Filter

TeleConverter

Extension Tube

Lens Protector

Lens Clip

TECHNIQUE TIPS

BY WILL PRENTICE

Close-Up Lighting



I used a Tamron SP 90mm f/2.8 lens with the Metz 15 MS-1 Macro flash attached to the lens, and Metz 52 AF-1 bouncing into an Aurora Lite Bank LDM95 Multi Lite Disk. The Vanguard Alta Pro 2+ Tripod has adjustments for every angle – it lets me position my camera exactly where I want it.

Macro photographers are automatically drawn to flowers and bugs – and why not? Colourful, interesting and dynamic subjects, flowers and bugs are completely different from everything we normally photograph.



Will Prentice is a portrait and landscape photographer. He likes to share his knowledge, and a few laughs, at camera clubs across Canada. He's also the host of PHOTONews TV on YouTube. For more of his work and bio, check out www.capturaphoto.ca



When I bought my first Macro lens, it stayed on my camera for three straight months. I looked at and photographed anything and everything – including bugs and flowers!

There are many ways to photograph and light macro subjects. Here are two of my favourite setups.

For the Lego Photo Shoot image, I used a Tamron 70-200 lens with extension tubes – these tubes allow any lens to focus closer. You can't use them all the time as they don't allow you to focus on subjects at a distance – extension tubes are ONLY for close-up work.

To light the set, I used the C-LUX – a new LED from Aurora Lite Bank. These compact, 95+CRI lights feature a long-life integrated Lithium ion battery. I chose LED as this image is a focus stack from 8 images (ISO64, f/9, 1/5th second). For a focus stack, lighting can't change – the C-LUX are perfect for this!

Bicycles, cars and any other engineered items have so many photogenic parts. I love to see the details in my bikes – there are limitless possibilities! From the shape of individual teeth on the rear cassette to the curves of the carbon frame, a bike looks like a piece of art when the components are viewed through a macro lens.

I used the Metz 15 MS-1 as the key light for these images – it's a macro flash with two flash tubes! The 15 MS-1 attaches to the front of my lens (a Tamron 90mm macro), so the light goes where I go. I can shape the light between the flash tubes by adjusting the output ratio.

As you focus closer with your macro lens, your Depth of Field gets very shallow. This image was taken at f/13, 1/100 second, ISO 64 – the front of the chain and chain ring is nice and sharp while the middle of the ring is softer due to a shallower DOF.

To get the desired sharpness throughout the scene, I stacked 8 images and merged them in Adobe Photoshop CC. Aurora C-LUX LED lights ensured lighting was consistent for each image – this is vital for image stacking. 8 images at f/5, ISO 64, 1/5 second, self timer and remote shutter release.



I chose the 200mm focal range for this setup to get the angle of view I wanted. This meant I needed Kenko Extension Tubes to be able to focus close enough. Why the ruler? Check out the next PHOTOnews Flash e-newsletter to find out!

I also used a Metz 52 AF-1 as a background light or as a fill light, to help separate the subjects from the background. I used the 52 AF-1 with the integrated fill card or bounced off of an Aurora Lite Bank multi-reflector for a softer fill. Both the 15 MS-1 and 52 AF-1 work with my camera's integrated off-camera flash system. The 15 MS-1 is designed to work with Canon, Nikon, Sony, Olympus and Pentax TTL systems, as well as in optical slave mode. It will work with practically any camera!

LED lights are great when your subject doesn't move or you need to "see" your light before taking the image. This is really helpful for reflective subjects, to minimize glare and unwanted reflections. Flash is a better choice when you are moving around your subject or when your subject moves. Point an LED at a bug and the bug is gone! Flash allows you to shape your light with more control. Flash is also more powerful, for those times when you want to keep your ISO lower for cleaner images.



The other important tool for macro and close-up photography is a versatile tripod! I like the Vanguard Pro tripods, in this case an Alta Pro 2+, as you can move the centre column to horizontal or vertical positions. You can easily adjust the legs and centre column to position your camera exactly where you want it to be, and the tripod will keep your camera very steady.

When you want to take pictures, and the weather just won't cooperate, just grab your camera and macro lens, and take a look at the details in objects in your environment—you may discover a fascinating new range of photo opportunities!

Gear List

Lenses and lens accessories:

- Tamron SP70-200mm f/2.8 Di VC USD G2
- Tamron SP90mm f/2.8 Di Macro 1:1 VC USD
- Kenko Extension Tube Set DG

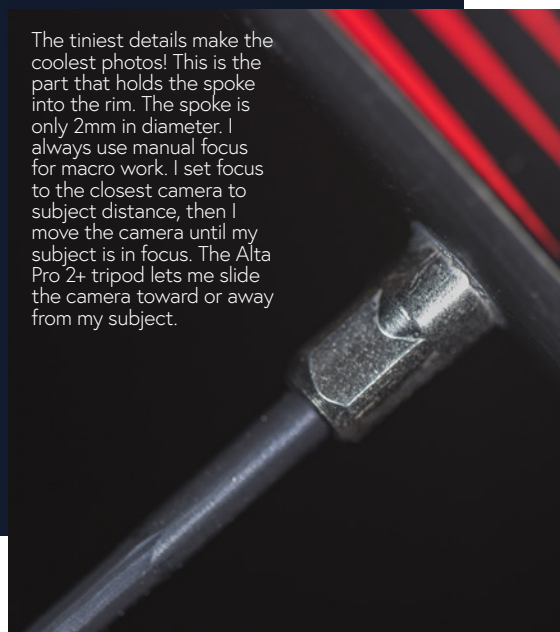
Tripod:

- Vanguard Alta Pro 2+ 264CT
- Vanguard Alta PH-32 Pan Head

Lighting:

- Metz 15 MS-1 Macro Flash Kit
- Metz 52 AF-1
- Aurora Lite Bank C-LUX LED

The tiniest details make the coolest photos! This is the part that holds the spoke into the rim. The spoke is only 2mm in diameter. I always use manual focus for macro work. I set focus to the closest camera to subject distance, then I move the camera until my subject is in focus. The Alta Pro 2+ tripod lets me slide the camera toward or away from my subject.



Panasonic



Challenge

Congratulations to the winners of the PHOTONews "Cool Photo!" Challenge, and to all of the readers who participated in the contest thread at our flickr® group at www.flickr.com/groups/photoneWSgallery/.

Our winning photographer will receive a special prize – a Lumix DMC ZS100S from Panasonic Canada, our PHOTONews Challenge sponsor for 2018.

You could be the winner of the next PHOTONews Challenge and have your photo published in the Summer issue – for more information please see page 66.

The Sky is Falling!

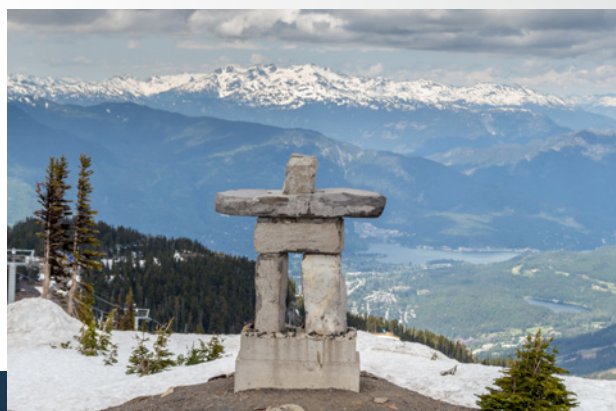
Jean-Philippe Castonguay, of St-Anne-De-Bellevue, Quebec, photographed this picture of Niagara Falls during the peak of winter with a Nikon D600 at 1/15 second, f/22, ISO 50. *"The harsh winter froze the mist to everything in its surroundings including bushes, railing and walkway, making for a beautiful setting."*

Winner



Inuksuk Stands Guard

Colin Soo, of New Westminster, BC, captured this image using a Canon T4i with a Tamron 24-70mm f/2.8 lens shooting at f/2.8, 42mm, 1/4000 second, ISO 200. *"This shot was taken at the top of the Whistler Mountain ski resort. We rode the gondola up the mountain and discovered this Inuksuk standing guard of the commanding view."*





Skeleton of Summers Gone

Marianna Armata, of Pierrefonds, Quebec, captured this image with her Panasonic GH2 and 14-140 lens, shooting at f/22, 1/2000 second, ISO 160. *"This photo was taken near Mirabel, Q.C. on a bitterly cold March day. I was looking for snowy owls when this rural landscape caught my eye. I was drawn to the 'fingers' and the stark contrast of this summertime farm implement scratching at the winter sky."*



Ramsey Lake Skating Path

Pierre Lachapelle, of Sudbury, Ontario, took this photo with his Canon EOS 5D Mark III, on a tripod, shooting at 65mm, f/8, 1/60 second, ISO 50. *"I was on top of a mountain overlooking the Ramsey Lake skating path on a clear and cold evening, just waiting until sundown so I could capture the blue reflection"*.

Vancouver and the North Shore Mountains

Michelle Fedosoff, of Burnaby, BC, captured this image with her Canon EOS 40D, shooting at 190mm, 1/1000 second, f/11, ISO 400. *"I was walking the Stanley Park seawall when I looked across the water and noticed the winter mountains. They seemed to be floating above the city."*



Each issue, PHOTONews presents a gallery of spectacular images from our readers, as posted in the pool at the flickr® group.

To view the full array of images from PHOTONews readers, please visit the pool at www.flickr.com/groups/PHOTONewsgallery/pool



Sammy's Eye

Bea Binka, from Kitchener, Ontario, captured this image of Uncle Sam "Sammy", an American Bald Eagle, at the Canadian Raptor Conservancy, using a Nikon D4s with a 70-200mm f/2.8 lens at 200mm, f/5.6, 1/2000 second, ISO 1250. "The sun was getting low, just above the tree line, and the light was illuminating the bird like a flashlight. I saw the possibility of this image; timing was the key—finding that sweet spot where the wings were not too far forward or too far back was the key to the image."

The View from the Porch

Dave Jackson, of Toronto, Ontario, took this photo of St John's Outer Battery with a Nikon D7100 and a Tamron SP 70-200mm F2.8 Di VC USD lens while on vacation in Newfoundland. "The photo is a two picture panorama, merged in Lightroom, and each picture was shot at 70mm, f/4, ISO 400, 2.5 seconds. The photo is part of a series of sunset and night shots of St John's harbour from the porch of a small cottage we had rented."





Mountains and Galaxies

Shirley Davis of Calgary, Alberta, captured this image of the mountains and the stars on a beautiful summer evening in Kananaskis Country. She used a Canon EOS 6D and an EF 16-35 mm f/2.8 lens, shooting at f/2.8 for 25 seconds, ISO 6400. "It's typically cloudy in the mountains so when this warm, clear night occurred I drove an hour to the mountains to capture this moment. I was lucky enough to also capture a shooting star from the Perseid meteor shower."



Malay Cruiser from below

Jen St. Louis, of Elmira, Ontario, captured this image of a Malay Cruiser butterfly at the Cambridge Butterfly Conservatory, using a Nikon D750 and 105mm macro lens, shooting at 1/200 second and f/8, ISO 180. "Lighting was challenging at that time of day, so rather than fight the light, I decided to work with it and concentrated on trying to shoot as many backlit butterflies as possible. This was one of the best results, as the pattern in the wings really popped."

Dancer's Leap, Surrey B.C.

Gail Stephan, of North Surrey, B.C., used her Canon 5D MKIII camera and 70-200mm lens at 120mm, to capture this graceful image, shooting at f/3.5, 1/800 second, ISO 6400. "This event was a dress rehearsal of young dancers who belong to the Essence of Dance studio in South Surrey, taken at the Bell Centre for Performing Arts. It was my third year attending this type of rehearsal event of these fabulous dancers."



Alouette Lake Serenity

Gemy Bom, of Delta BC, captured this image of an Alouette Lake Sunset with a Canon EOS 5DS and EF16-35mm f/2.8L II USM lens, shooting at 1/15 second and f/4.5 at ISO 100. "I took 5 shots and stitched them together to create this panorama photo".



THE MAGIC OF...

BY MICHEL ROY

Shooting RAW

For many professionals, the digital image file format of choice has been RAW for the past decade. There are several very good reasons for this—a RAW file contains unprocessed, uncompressed greyscale picture data from the digital camera's image sensor, along with information about how the image was captured (metadata). It's like a photo negative—you can easily adjust white balance, exposure, contrast, colour saturation, sharpening and image effects, add vignetting or crop the composition, and then save the resulting image as a processed file in a format that can be read by a wide range of computer programs, along with the original file.

All of the camera manufacturers have their own way of saving RAW files—the proprietary file formats are called "raw", "nex", "dng" and so on, but the concept of recording the image in the camera as an uncompressed and unprocessed file is the same, despite the variance in file nomenclature from camera manufacturer to manufacturer.

In a way, shooting RAW and then processing the image is like magic... what used to take hours of painstaking dark-room work and negative retouching in the film era can now be achieved in a matter of minutes.

When you adjust a camera RAW image, the original data is preserved. All the adjustments are stored as metadata in an accompanying "sidecar" file, in a database, or in the file itself. You can always go back to the original file and process another version to achieve a different effect.

Post-Processing Software

You can use the camera manufacturer's proprietary program to process the image file, or you can use a software program like Photoshop, Camera Raw, or Lightroom to interpret the camera's RAW file, using information about the camera and the image's metadata to construct and process a colour image that you can save in your favourite format.

Why shoot RAW? To give yourself the opportunity to fine-tune the image. Can you post-process a compressed jpeg file to achieve similar results? Sometimes, but not to the same degree—when you shoot jpeg, your camera immediately processes the final image and saves it as a compressed jpeg file... you can specify small, medium, large, or original size jpeg files, and set the file menu to record basic, fine, or extra fine detail.



Michel Roy, from Quebec City, is the owner of Digital Direct Photos and Videos, specializing in a full range of photography and video from corporate assignments to weddings. For a visual adventure, visit the website at www.digitaldirect.ca.



Ritz Carlton Lobby

I shot this image of the lobby at the Ritz Carlton Hotel for a magazine article. The first thing you do when you open a RAW image file is to adjust the colour balance. This can be done by selecting the colour balance tool at the top left of the screen, and then clicking on a grey/neutral area of your image—everything is non-destructive, so you can try many times and re-adjust the colour if necessary in the settings afterward if necessary.



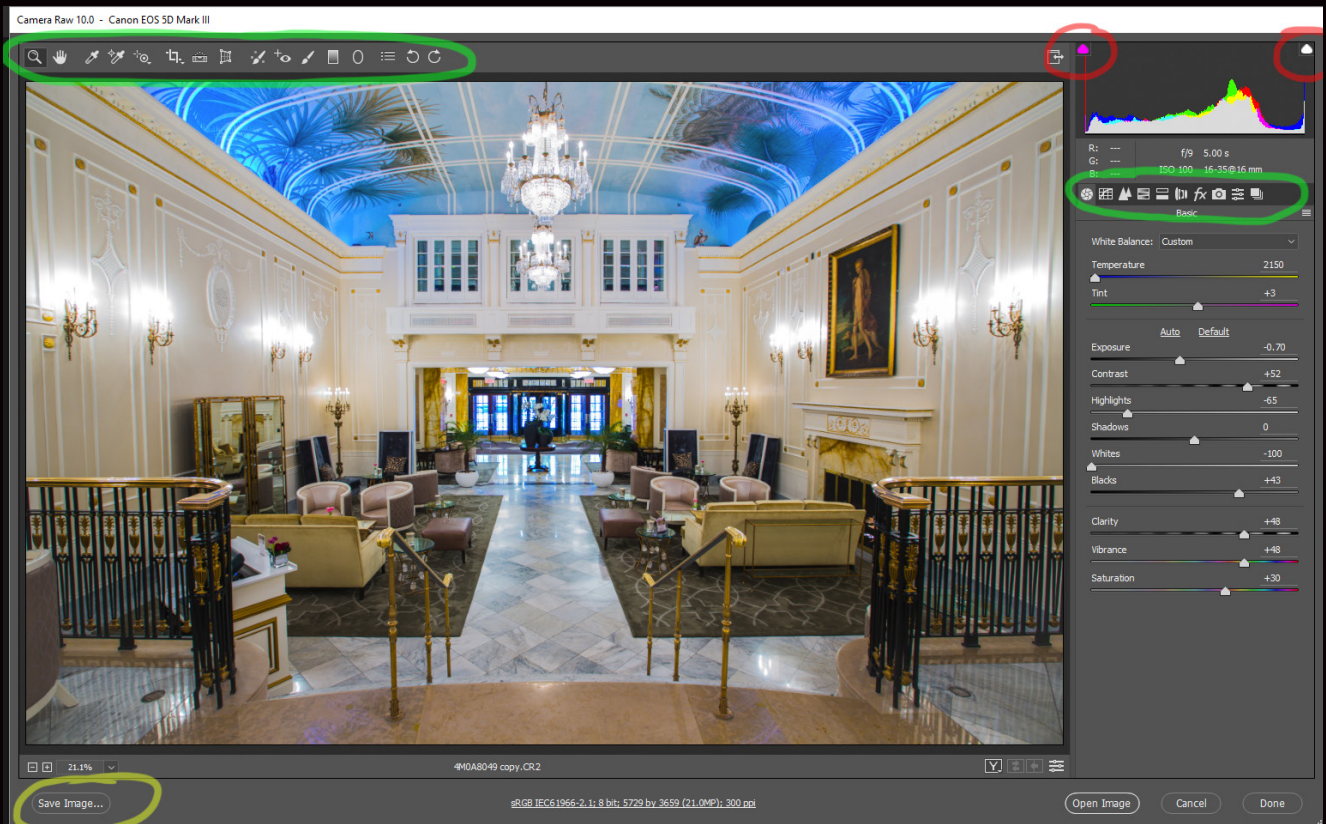
Some cameras let you save the image in two file formats, usually "RAW plus jpeg". The advantage of this in-camera option is that you will have a compressed jpeg file as well as a RAW file for each image—you can use the jpeg file if you are in a hurry, and process the RAW file when you have time.

Is RAW really better than jpeg? In many cases, yes... because it gives you a much wider range of image adjustment potential and it records a much larger file with greater detail than a

compressed jpeg file. Using Adobe Bridge, Camera Raw, or Lightroom software, you can modify your images more than most people might imagine.

It would take a large book to go through all of the settings and the buttons in these software programs—the idea behind this article is to encourage you to look into the range of image adjustment options available when you shoot RAW files, compared to the more limited adjustment range available with a jpeg file.

For the professional photographer and the avid photo enthusiast, these software alternatives can save you a lot of time in post-processing, especially when you use batch processing to modify a group of images shot under identical conditions.



Here is a classic way of working with your RAW files:

Copy all your Camera Raw files to the same folder and make sure to save them, as these become your "negatives" and you can always come back to develop them again to achieve a different "look".

You can open RAW files in Camera Raw, Adobe Bridge, or Lightroom. Colour adjustments include white balance, exposure, and saturation. Start with the adjustments on the Basic tab, and then use controls on the other tabs to fine-tune the results. If you want Camera Raw to analyze your image and apply approximate tonal adjustments, click Auto on the Basic tab.

The Auto setting will try to make adjustments everywhere, this is not the best approach—it is always better to use your creative eye to get the result you desire.



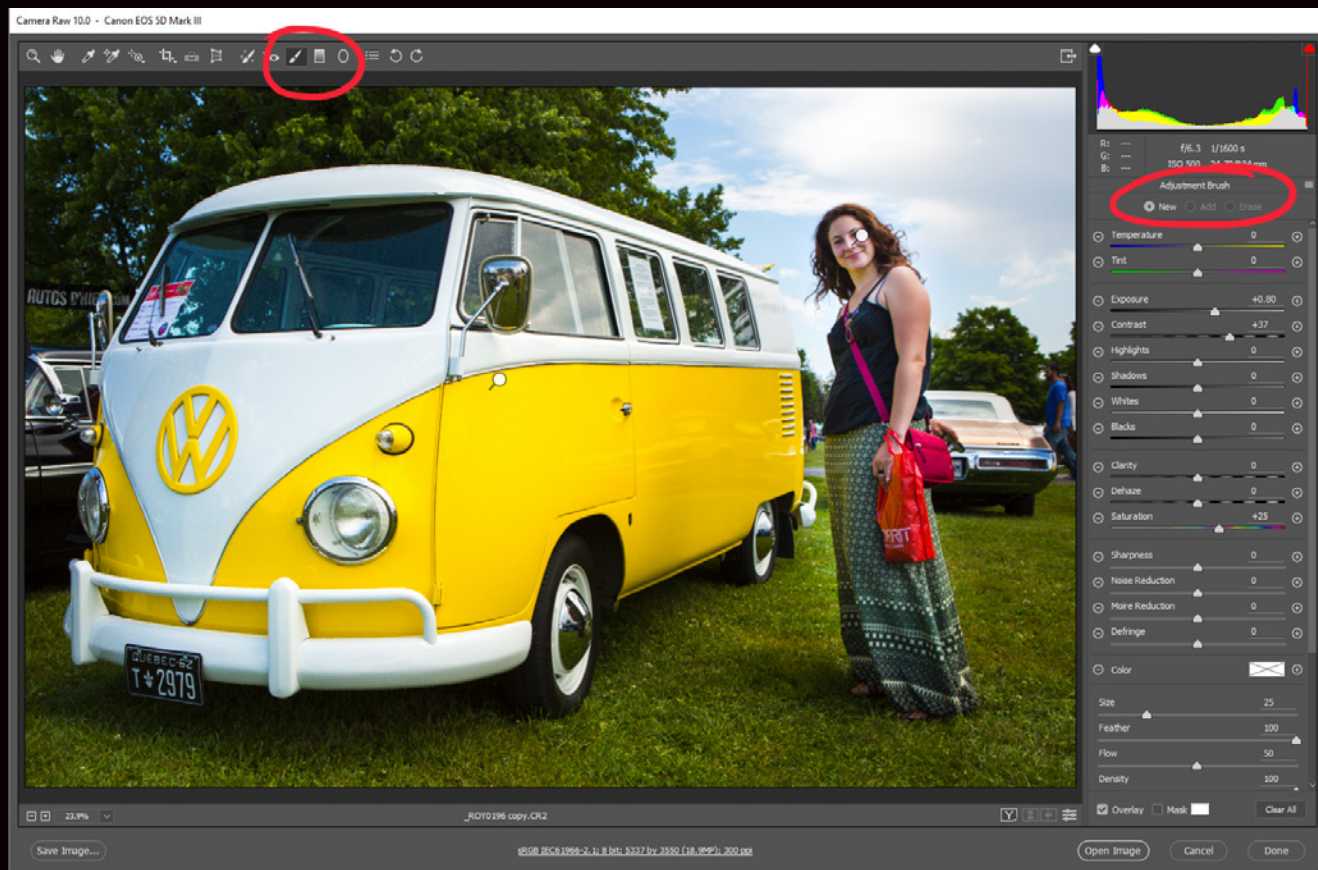
VW Fan

My good friend Marion was visiting Canada from France and she loves the shape and artistic potential of the VW beetle. Using Local Adjustment and the Vibrancy and Saturation settings, I was able to transform a basic shot to create a very cool souvenir. I finished working my magic by cropping the image to keep just the car and the subject.

Sharpening the image, reducing noise, correcting for lens defects, and retouching can also be performed on the other tabs.

You can save, import, and share preset values in both software programs. This can be fun and an easy way to start the editing process.

When all the adjustments are done, you can save one file or several versions of your edited image—these can be new jpeg files with different compression factors, or you can save a jpeg version and a tiff file, as you see fit.



The Camera Raw zoom controls are:

- Zoom tool
- Hand tool
- Preview
- Shadows and Highlights

The program displays shadow and highlight clipping using the buttons at the top of the Histogram. Clipped shadows appear in blue, and clipped highlights appear in red. Highlight clipping is shown if any one of the three RGB channels is clipped.

The Camera Raw image adjustment tabs are:

- Basic
- Adjust white balance, color saturation, and tonality
- Tone Curve
- Detail
- HSL / Greyscale
- Split Toning
- Lens Corrections
- Effects
- Camera Calibration
- Presets
- Snapshots

When you view camera raw files in Adobe Bridge, the thumbnails and previews use either the default settings or your adjusted settings. The Adobe Bridge cache stores data for the file thumbnails, metadata, and file information. Caching this data shortens the loading time when you return to a previously viewed folder in Adobe Bridge. The Camera Raw cache speeds the opening of images and rebuilds of previews in Adobe Bridge when image settings change in Camera Raw.

Cache folders can become very large, so you may want to purge the Camera Raw cache or limit its size. You can also purge and regenerate the cache if you suspect that it is corrupted or old.

Camera Raw and Lightroom share the same image-processing technology to ensure consistent and compatible results across applications. For Camera Raw to view image adjustments made in the Develop module of Lightroom, metadata changes must be saved to XMP in Lightroom.

Adjustments made in Camera Raw are also displayed in the Adobe Bridge Content and Preview panels.



Marché Bonsecours, Montreal

Whenever I visit Montreal, I find that the "early birds" get the best shots. For this very scenic destination, the best light always seems to be at sunrise, when the lighting is flat but beautiful. I often begin the post-processing workflow by playing with the slider to dramatically change the look of the image. Of course, there are no right or wrong settings; it's all a question of taste.

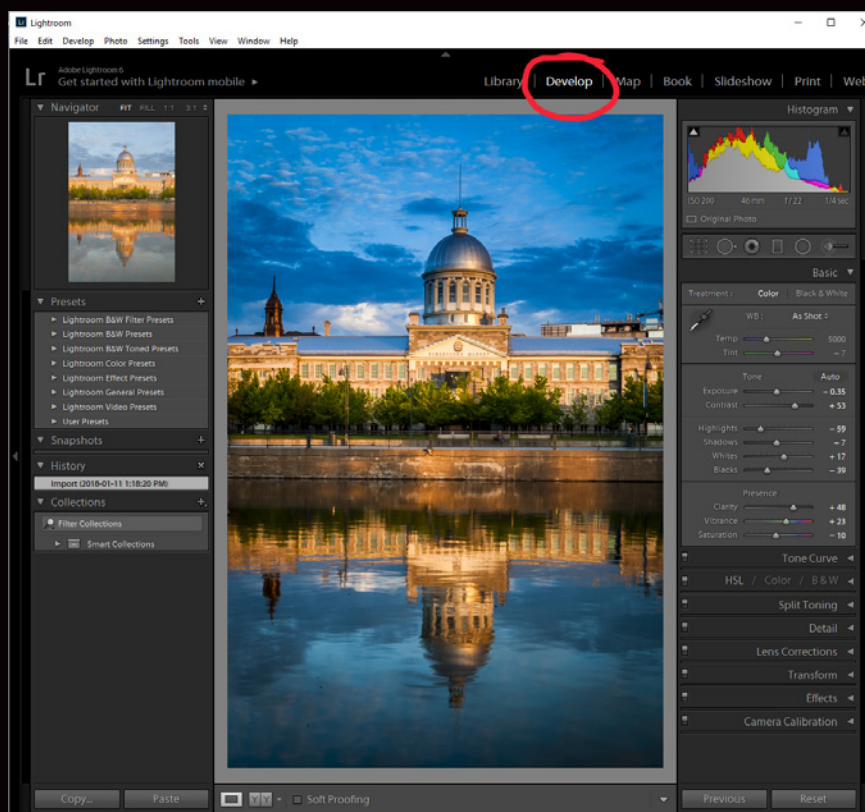


PHOTO DESTINATION

BY WAYNE LYNCH

Vancouver Island Kayak Adventure

No matter how often I watch the last crimson glow of a setting sun at the end of a summer day I always feel grateful—as though I have been given a special gift from nature reminding me how precious life is, and to never take it for granted. This past August, on the northwest coast of Vancouver Island, shouldered on one side by ancient forests of spruce, hemlock and cedar and on the other by the vastness of the Pacific Ocean, I sat with my wife Aubrey of 43 years and reflected on the sunsets.



Dr Wayne Lynch had so much fun kayaking the waters of Vancouver Island with West Coast Adventures that he plans to return again this summer.

For additional visual adventures please visit www.waynelynch.ca





We were on a one-week kayak and camping adventure organized by the experts at West Coast Expeditions. The trip was advertised as a "Sea Otter Kayak Tour" featuring curious sea otters, Steller's sea lions, and the possibility of paddling with whales, as well as a chance to view black bears as they forage along the shoreline. If you know me, you can imagine how I was sold on the concept from the moment wildlife was mentioned.

My wife and I are novice kayakers, and we were concerned that the trip might be too challenging for us to enjoy. We needn't have worried. Within the first half-day the expert kayak instructors had us safely paddling without a worry. As a photographer, my next concern was how to safely take pictures from a kayak to capture the beauty of the area. Here are seven tips that may help you if you venture onto the water this spring.



Partner or Go It Alone

The first decision my wife and I had to make was did we want to paddle our own kayaks or paddle together in a two-person craft. We chose the latter. Two-person kayaks are more stable, and with Aubrey paddling in front she could position the kayak for better photographs. This worked out beautifully. You may have noticed that in many pictures taken by photographers paddling alone, the bow of the kayak is shown in the foreground to give the image scale and depth. I think that a person is more interesting as foreground than the pointed bow of a kayak—especially if that person is someone special to you.

Leash Your Paddle

Whenever I paused to photograph I would balance the paddle in front of me across the deck of the kayak. A few times, the paddle accidentally slipped into the water but I was always able to grab it before it floated away. That's when I realized a leash for the paddle

Raft of Male Sea Otters



Steller's Sea Lion



would have been a great idea. Coiled leashes sell on the internet and in outdoor stores for less than \$20 and they provide an inexpensive safety line for your paddle without hampering your photography.

Choosing a Camera

Among the seven other paddlers in our kayak group, several took pictures with their cell phones, one person used a waterproof compact camera, and another used a remotely triggered GoPro mounted on the bow of her kayak. For digital file size, minimum noise, and maximum quality, there is no question that the best photographs are produced with a digital SLR, and for that reason I used a Nikon D800 (36 megapixel, FX-format) camera to take all of my kayak photographs.

The Value of Zooms

While I was kayaking, my photo targets were always the same: landscapes, people and wildlife. I thought it would be risky to be changing lenses while I was bobbing around on the ocean, so I decided to use just one lens, the image-stabilized Nikon 28-300mm f/3.5-5.6, a zoom that offers both wide-angle focal lengths as well as medium telephoto capabilities.

If you are a Canon user, a 70-300mm f/4.5-5.6 might be a good choice although the wide-angle option would be missing. The Tamron 18-270mm f/3.5-6.5 which is available in either Nikon or Canon mount, would also be a great option. No matter which DSLR camera you use, you need to evaluate ahead of time which subjects interest you, and select a zoom with the focal lengths that will best serve your needs.





Green Anemone and Bat Star

Splash Protection

Saltwater and electronics don't mix, and even a small splash on your equipment can cause serious problems. To protect my camera and lens while I was paddling I used a clear Seal-Line dry bag that I stowed in front of me, secured to the deck of the kayak under two Bungee cords. To seal the dry bag you roll the top and fasten it with clips, but when sea conditions were calm I kept the camera just inside the open mouth of the bag as this made access easier.

I also carried a microfibre cloth in a pocket on the front of my life vest to dry any water that splashed onto my gear, and I frequently checked the front of the lens for water droplets which, if undetected, can produce annoying blurry puddles in your photographs.

Green Anemone



Funky Photo Angles

Like many photographers, I tend to press the shutter only when I am looking directly through the camera's viewfinder—I obsessively compose the image within the viewfinder frame. In the kayak, I suppressed this obsession, and used the live view display on the LCD screen to take some photos while holding the camera at water level, or with my arms stretched high overhead. Creative discoveries often arise when you break the rules. Don't be afraid to experiment. Digital images that do not work out are easy to delete.

Get Ahead of the Pack

When you are paddling with a group, if you can be in one of the front kayaks you can photograph the other boats coming toward you, rather than capturing them from behind. At the beginning of our tour I asked the group members if I could photograph them, and in exchange for their consent I offered to give them copies of any photos in which they appeared. Everyone happily agreed, and because they knew that I would be sending them images that would likely be more impressive than their own "selfies", no one complained when I asked them to move to a different position to improve the composition. Of course, I kept my word and sent their photographs right after the trip—don't be one of those photographers who makes promises they never keep!

Shooting On the Road

By Paul Morrison

Canoeing in Algonquin Provincial Park, Ontario. *Olympus OM-D E-M1 Mark II, M.Zuiko 12-40mm F2.8 PRO, 1/1000 second, f/2.8, ISO 400.*

It's common today, in the age of the 40MP smartphone, to hear people say something along these lines - "*the best camera is the one you have with you*". In a few short words, that helps to explain why, for the past two years, I have chosen to leave my heavy and bulky DSLR gear at home, preferring instead to shoot with the Olympus OM-D line of mirrorless cameras. I simply have my OM-D camera gear with me more often than when I used a full frame DSLR system.

Utilizing the Micro Four Thirds format sensor size allows Olympus to build professional grade camera bodies and lenses that are much smaller and lighter, and also significantly less expensive than their full frame counterparts. I realized recently that the superb M.Zuiko 40-150mm F2.8 PRO lens (80-300mm in 35mm

equivalent) weighs *much* less than the equivalent lens in a DSLR system. Imagine an 80-300 f2.8 (in full frame terms) that is razor sharp wide open, focuses incredibly fast and remarkably close and fits into my camera pack where a lens the size of my 24-105mm f4.0 used to sit. Try to list all of the companies that even make a lens in the 80-300mm focal length range. If you find a lens with similar specs, check out how much it weighs and how much it costs, and you will see why so many serious photographers are switching to the OM-D system.

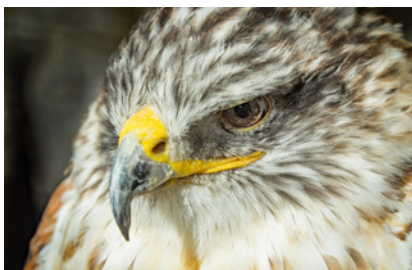
The Olympus OM-D system has leading edge technologies that provide superior image quality to go along with its incredible portability, including up to 6.5 stops of in-body image stabilization, 50MP High Res Mode, focus stacking in camera, Live Composite, no AA filter, and a silent electronic shutter with speeds of up to 60 frames per second in full RAW mode help narrow any gap, real or imagined, *very quickly*. Olympus lenses are universally at the top of their class and this also plays a major role in maximizing the image quality possible with the smaller format.

For frequent air travellers, the Olympus system is the perfect solution. Each year, airlines are becoming increasingly rigid in their limits on the size and weight of a photographer's carry-on baggage. To me, this alone is a deciding factor for owning the excellent Olympus

system. My travel backpack with my OM-D equipment weighs less than half of what I carried when I used a similar full frame system kit, and I no longer have to leave gear at home because of carry-on size limitations. Better still, I am now carrying a *more capable* system. Bringing the M.Zuiko 300mm F4.0 IS PRO lens that is the equivalent of a 600mm f4 in your carry-on is not only possible, it's only about the size of many 70-200mm f2.8's! Imagine the luxury of having a 60mm macro that weighs about a quarter of a pound (about a third the weight of the DSLR system's 60mm macro) and the M.Zuiko 60mm F2.8 Macro lens reproduces at 1.25x life-size (2.5 times larger than the DSLR model lens)!

That's why I switched to the OM-D system - and I'm not looking back!

Hear more from other photographers who have made the switch to the Olympus OM-D system at www.getolympus.com/neverlookback



A Ferruginous Hawk in a recovery facility high above Lake Como, northern Italy.
Olympus OM-D E-M1 Mark II, M.Zuiko 40-150mm F2.8 PRO with MC-14 1.4x Teleconverter, 1/640 second, f/5.6, ISO 200.



Paul Morrison is a professional ski and landscape photographer living in the resort town of Whistler, British Columbia. Since attending Sheridan College's Applied Photography program in Oakville, Ontario, he has made a living photographing skiers and the mountain world that is their home. Working as a Senior Photographer for leading ski magazines, he has had over 250 skiing related covers. He has been the Senior Photographer for North America's largest ski resort, WhistlerBlackcomb, for more than 35 years. Dreams have indeed come true for a kid from Burlington, Ontario!

OLYMPUS



OM-D
E-M1 Mark II

PORTFOLIO • Randy VanDerStarren

Take Your Seat



Randy VanDerStarren is a Canadian photographer who walked away from an enviable career in advertising and financial services to pursue his dream. His work has been featured in Toronto galleries, shared the limelight with the Toronto Symphony at Roy Thomson Hall, and has just been installed at both Terminal One and Three at Pearson International Airport.

PHOTONews asked Randy to share his thoughts, and describe the philosophical journey behind the creation of his "Take Your Seat" project.

The United Arab Emirates showcase a desert's ethereal beauty. One of many highlights on our incredible journey. Nikon D750, 18mm, f / 8, 1/250 second, ISO 640.

One day.

How many times have you caught yourself saying those two seemingly innocuous words?

Three years ago, after testifying before the Canadian Senate Standing Committee on Banking, Trade and Commerce, I realized that I had promised myself "one day", one day too often. At last, I was brave enough to face the proverbial question: *How did I get here?*

Of course, I understood how my career choices found me standing on Parliament Hill, briefcase instead of camera in hand. However, the philosophical gap between where my life was, and what I had intended, was cavernous.

My degree is in Film. I have worked for large advertising agencies including Ogilvy & Mather, and Young & Rubicam. Yet somehow my love of photography had taken a back seat to a career running an

investment management firm. I had allowed my early heroes, Yousuf Karsh and Ansel Adams, to be overshadowed by Warren Buffet.

The Take Your Seat project gave me back my inspiration. A simple director's chair, a pen and a camera reignited an almost forgotten passion. My years of creating thirty-second connections gave birth to a motivational symbol with four legs, a bit of canvas and an entire planet waiting to be rediscovered.

The director of any movie, good or bad, decides what shows up on the big screen. Think of your life as the biggest screen of all. Suddenly, you become free to enthusiastically direct what happens next.



Mosque

Abu Dhabi's Grand Mosque suggests a power much greater than ourselves. You leave having restored your faith in mankind. Nikon D750, 18mm, f/16, 1/160 sec, ISO 640.

We only get one planet. We only get one life. Take Your Seat challenges you to take care of both. The fragile beauty of nature reminds us that we have a responsibility to preserve what we admire. The insertion of a simple chair into a scene makes a compelling statement: Mother Earth, and our lives, cannot be taken for granted.

For the past two years, we have happily lugged our chair over hills and valleys to visit the temples and beaches of nine countries. I say "we" as my entire family, Austin, Spencer, Bo, Evan and Eva, my ever-patient wife, have accompanied me on countless expeditions. In fact, Spence, with his own uncanny shooting style and technical expertise, has become my invaluable partner. Shooting alone pales in comparison to sharing the experience with the people I love most.

We have survived rogue waves and desert winds. We have felt dwarfed by sequoias and mesmerized by night skies. We have been left breathless on the edge of ancient glaciers.

Incredibly, a simple director's chair has become an icon symbolizing personal choice. At our gallery exhibits and keynote presentations, I have had the privilege of seeing people experience the same revelation I had on that pivotal day on Parliament Hill.

Nowhere has that revelation been more pronounced than in our own 10-million square kilometre backyard.

Our Canada 150 series opened my eyes to the incredible and diverse beauty of my home. Only now, after driving 15,000 kilometres, skimming above the Arctic tundra in a helicopter, and stumbling across bison, moose and lynx, do I truly appreciate the vastness and variety that is Canada. "There" is no



Thailand

Bangkok, Thailand, during Songkran celebrations. A deluge of happiness leaves no room for darkness of any kind as Thai's welcome in the new year. Nikon D750, 35mm, f / 5.0, 1/100 sec, ISO 400



Pic Island, a natural wonder along Lake Superior's North Shore, inspires us today as much as it inspired the Group of Seven 100 years ago. Nikon D750, 18mm, f/22, 1 second, ISO 160.



longer more compelling than "here".

Our *Take Your Seat with the Group of Seven series*, completed last autumn in collaboration with the McMichael Canadian Collection and the town of Marathon, gave me a memorable lesson in living history. The enduring beauty of the North Shore of Lake Superior compelled Lawren Harris and his fellow painters, season after season. 100 years ago became a seminal moment of my present as my legs shook standing in the same places, compelled by the same natural beauty that inspired brush to canvas almost a century ago.

Our latest expedition, *Take Your Seat*, *Hong Kong*, found our chair equally comfortable at the peak of Lion Rock to the edge of Victoria Harbour. The World Wildlife Fund opened a door to the natural side of Hong Kong most people never get to see.

Through my photography, I have been fortunate to become friends with my planet. Like my gear and my journals, I know her well. I hope that the *Take Your Seat* images will compel you to strike up your own conversations with Nature, with the past, and with yourself.

Hong Kong

Hong Kong's Global Geopark is as impressive as its skyline. Nature needs to be venerated. With that respect, we're certain to take care of her. Nikon D750, 22mm, f / 25, 15 second, ISO 50.



"One day" - these are the only two words that stand in your way. Flip them around - turn "one day" into "day one" of the rest of your more passionate, more enduring, more meaningful life.

I sincerely hope that the photography and words of the *Take Your Seat* project will encourage you - perhaps even challenge you - to *Take Your Seat*.

Toadstools

Utah's toadstools stand defiant against wind and time. Their precarious balancing act suggests time is no longer on their side. Nikon D750, 18mm, f / 5, 1/500 second, ISO 100.

For a breathtaking array of images from the *Take Your Seat* project, please visit www.takeyourseatonline.com and follow @TakeYourSeatInsta on Instagram.





Hong Kong

Hong Kong is one of the most vibrant, energized and dynamic cities on the planet. The light is green prompting you to go.

TECHNIQUE

BY MICHAEL DEFREITAS

Israel: Land of Surprises



Carmel outdoor market Tel Aviv, Israel.
Nikon D800, 16mm, f20, 1/125 second, ISO 200.

See more great photos:
www.photonews.ca/defreitas



Michael DeFreitas is an award-winning journalist specializing in travel and photography. For an unforgettable tour of the world through Michael's lens, please visit www.iwritetravel.com

Besides religion, Israel offers a surprising variety of historical and cultural photographic opportunities.

DE—LI—CIOUS!

The 3-note chant drifted toward me across Tel Aviv's crowded open-air Carmel market. Curious, I hurried down a side alley and found the Arab baritone making the most delicious fresh fruit punches.

"Pomegranate, pineapple, orange, mango?" he asked. All I could think of in response was "Surprise me!"

In a flash, he picked up a selection of fruit and started squeezing the juice as I took photos using my 14mm wide-angle zoom lens. I pre-focused midway between the vendor and the closest colourful fruit and shot at 1/125 second and f/20 for a wide depth of field. After paying for my tasty treat, I continued documenting the scenes in the busy market. Having two camera bodies with different lenses (14mm-24mm and 24mm-70mm) helped me work quickly and efficiently.

Besides the obvious religious attractions, tiny Israel is chock-full of many other surprises. From its sprawling cities along the fertile Mediterranean coast, to its kibbutzim in the high Judean Desert, you will find a wide range of photographic opportunities. As it turned out, my Carmel market foray was only an appetizer—one memorable bookend to a surprise-filled visit.

After spending a few days shooting around modern Tel Aviv, I headed north along the coast to Haifa, making a brief stop at the Tishbi-Baron Wine Cellars. Who would have guessed that Israel had a thriving wine industry! Between sips of their elegant Tishbi Estate 2005 Cabernet Sauvignon, I placed bottles and half-filled glasses on a table near the window so I could get enough light for a wide f18 depth of field.

Using a guidebook under my lens to help prop up my camera in the vertical position (not enough room to set up a tripod), I framed the bottle and glass along the vertical third lines leaving some space in the upper left third of the frame for a happy patron. I had to shoot at 1/10 second, so I used the camera's self timer to avoid any camera shake. This method yielded sharp foreground subjects with slightly blurred patrons in the background. Needless to say, I was in excellent spirits on the ride to Haifa.

We spent the next morning in the ancient walled city of Akko on the northern promontory of Haifa Bay. One of the city's rare treasures is the restored Turkish bathhouse,

Israel, Jerusalem.
Dome of the Rock
Mosque, Old City
Jerusalem, Israel.

At the Dome of The Rock mosque I used one of the arches in the surrounding wall as a 'frame' around a couple of the tourists to give size perspective. To render both the arch and the mosque in sharp focus, I used f/20 and pre-focused on the pavement midway between the two.
Nikon D7100, 32mm, f20, 1/200 second, ISO 200.





Dome of the Rock and Old City, Jerusalem, Israel. Nikon D7100, 56mm, f/5, 1/200 second, ISO 100.



Hammam Al-Basha restored Turkish bathhouse, Akko, Israel. Nikon D800, 16mm, f/14, 1/2 second, ISO 200.

Hammam Al-Basha, built by El-Jazar in 1795. Now a museum, the main steam room features beams of sunlight streaming down through small openings in the ceiling onto lifelike bronze figures depicting bathhouse activities.

I shot the scene with my 14mm-24mm zoom lens and camera mounted on a tripod. Shooting in manual mode at f/14 and 1/2 second I used the camera's exposure compensation control to make a series of over and underexposed images to find the best exposure to accentuate the beams of light.

From the coast, I headed back inland to Jerusalem. No other place on earth holds more spiritual significance to so many religions as Jerusalem's one-square-kilometre Old City. For three days I wandered the narrow cobblestone alleyways of the Old City's Jewish, Arab and Christian Quarters looking for signature images. At the Dome of The Rock mosque I used one of the arches in the surrounding wall as a 'frame' around a couple of the tourists to give size perspective. To render both the arch and the mosque in sharp focus, I used f/20 and pre-focused on the pavement midway between the two.

Below the mosque, at the Western Wall, I decided to use details and drama to capture worshipers. I used f/8

PRO TIPS MORE ISRAEL SHOOTING TECHNIQUES

- Always be aware of the religious aspect of the country. Most buildings/sites have religious significance, so please be respectful.
- Use a medium/long lens when recording activities and details around any important religious site like the Western Wall or Temple Mount. Try not to distract or annoy the worshipers.
- Dress appropriately when photographing inside any religious site. Long sleeves and long pants are recommended.



Tishbi Estate Winery, Israel.
Nikon D800, 48mm,
f/18, 1/10 second,
ISO 200.

I spent my last afternoon looking for another bookend image. Since my first bookend image was a low early morning shot, I opted for an elevated dramatic late day shot for my second. It was almost sunset when I stopped two boys and asked if they could recommend a high vantage point for photos. As it turned out, they were exchange students from the Tanenbaum Community Hebrew Academy of Toronto, and five minutes later I was setting up my tripod on the roof of their school overlooking the square. The resulting juxtaposition of worshipers along the warmly lit Western Wall, with the cobalt blue Temple Mount mosque and sky above, provided the other bookend to my visit.

When documenting your travels, try to capture images that help tell the story of your experience, and remember to look for bookend images. Every good travel story needs a beginning and ending.



Left: A worshiper at the Western Wall, Old City, Jerusalem, Israel. Nikon D7100, 200mm, f5.6, 1/400 second, ISO 200. **Centre:** I used f/8 and a diagonal leading line composition to accentuate the prayer offerings wedged into the cracks of the wall. **Right:** I used the rule of thirds for formal portraits and drama shots like the shadows on the wall.

and a diagonal leading line composition to accentuate the prayer offerings (messages on folded pieces of cloth) wedged into the cracks of the wall. When shooting details I always use a higher shutter speed like 1/250 second to avoid camera shake.

The wall was also a great venue for portraits of bearded and black dressed orthodox worshipers. I used the rule of thirds for formal portraits and drama shots like the feet of worshipers and shadows on the wall. I even braved the 178-step, spiral staircase to the top of the bell tower in the Lutheran Church of The Redeemer for a series of aerial views of the Old City. I don't recommend dragging 10 kilos of equipment up those stairs like I did, because all you really need is a camera body with a medium wide-angle zoom (24mm – 70mm).

Now I seldom try to politicize a destination, but sometimes it's too difficult to avoid a great photographic juxtaposition. Along the Via Dolorosa (the Way of the Cross) I spotted the words "We Need Peace" on a wall. I preset my camera to 1/200 second and f/11 and waited for a passer-by. My settings allowed me to freeze the person and render both subjects sharp. I waited until the subject's back was near the edge of the frame.

Along the **Via Dolorosa** (the Way of the Cross) I spotted the words "We Need Peace" on a wall. I preset my camera to 1/200 second and f/11 and waited for a passer-by to reach the edge of the frame.

READY TO TAKE IT TO THE NEXT LEVEL? GEAR UP!

I try to NOT look like a photographer—especially when shooting in religious or crowded places like markets or religious sites. That means no big camera bags, backpacks or photo vests. Use a small case. The VEO Travel 21 or 28 bags are about as inconspicuous as it gets.



TECHNIQUE

BY FRANCIS AUDET

Go Wide!

PANORAMIC IMAGES CREATE SPECTACULAR VIEWS

Panoramic images carry a great deal of impact. They stretch across a very large field of view, offering fine detail to enable the viewer to get a powerful sense of the scene.

There are two approaches to this technique—you could take a single shot with an ultra-wide angle lens and crop the image, but this would result in a relatively low resolution print—or you could shoot a series of images and stitch them together to create a very high resolution file that could be printed as large as a wall mural.

Let's go for the high resolution option!

Two steps are required for high-resolution panoramas: taking panorama-ready pictures, and stitching them together to achieve a powerful image.

Taking Panorama-ready Pictures

For your software to easily align and stitch individual images, they must overlap a little so the software can find similar features. Typically, an overlap between 15% and 35% works well.

Less than this, and the software will struggle to make a good match, while more overlap than this creates the risk that there may be too many points of similarity—the software could "over-think" the panorama and create grey areas. With a very wide angle lens, you should aim for more image overlap to mitigate the possible nonlinear effects that such lenses often produce.

One key to success when taking individual images for panoramic stitching is to keep constant parameters throughout all of the shots. You want uniform and continuous colours, with no clear demarcation point. Similarly, you want the same depth of field in all your shots. This means shooting with the same focal length, and the same focal distance, aperture and white balance.

Although the final panorama will likely be a horizontal image, the key to success is to take individual shots with the camera in a vertical orientation. This may seem counter-intuitive, but doing this will give you a wider panorama, with more substance and volume. In addition, you will have more room to crop if there are sections that are not quite aligned. More importantly, especially if a wide angle lens is used, aberrations and artefacts at the edges of the long axis of the individual images will not be used for bonding, and this will create a better end result.

Remember to keep your camera level while you rotate from shot to shot, or the resulting panorama will be a parallelogram and severe cropping will be required to get a final rectangular image. Some cameras have a built-in virtual level—use it! Above all, avoid walking left or right between shots "to improve your perspective."

Obviously, the best way to create images for a stitched panorama is to use a solid tripod, and you can use a pan head or invest in a specialized head designed for panoramic



Francis Audet, a master of light and perspective, is the founder of the Photo Planet Project, and a leader of seminars and webinars on a wide range of photo topics. For a stunning array of visual images, please visit www.francisaudet.com



photography. In addition to maintaining the plane of rotation, the tripod allows for all images to be taken from exactly the same place, avoiding possible distortions.

Stitching the Panorama

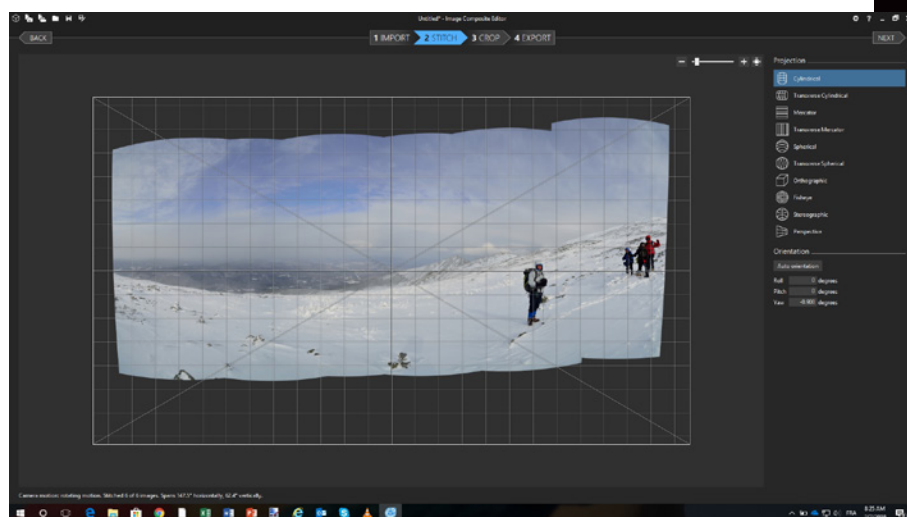
There are several software options to do this "stitching" of your panorama-ready images. Personally, my choice is Microsoft Image Composite Editor (ICE) (<http://microsoft-image-composite-editor.en.softonic.com/>). Efficient and simple, it gives excellent results, and it is free.

The process could not be easier. Just drag and drop the images to stitch into the ICE interface. From there, ICE will automatically position the images. All that remains to be done is the final cropping. The result is a high resolution panoramic image, in this case, over 60 megapixels.

So take your camera and tripod, add a dash of inspiration, and set off to explore the world of panoramic images—you will be amazed at the impact of this creative technique!

Displaying Your Work

There are many ways to enjoy the wide vista of a panoramic image! You can view your work on a computer monitor,



on a large screen TV, or project it onto a wide screen—if you create a high quality image the impact will increase as the presentation is enlarged—for top quality panoramas, the rule of thumb is "the bigger the better!"

In your home, your office, or a gallery, the most impressive way to display your panoramic images is by making a quality print to hang on your wall. There are special papers designed by Hahnemühle for this purpose, and offered in formats that are intended for use in a variety of printers.

For a full range of information please follow this link: www.hahnemuehle.ca/panoramic

TECHNIQUE

BY STEVE MAKRIS

Sunrise, Sunset...

Here's how to use smartphone apps to find the best time and location for spectacular solar shots!

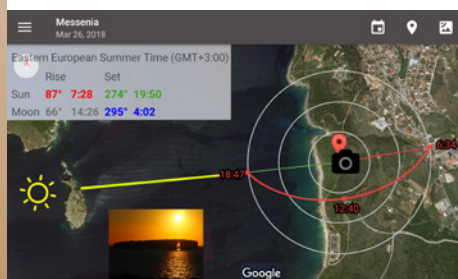
Great travel pictures are about being at the right place at the right time. That's a challenge if you are travelling on a fixed schedule, with others, or visiting a site for the first time—until you discover the technique of precision photography with smartphone apps.

I am a sun chaser, especially fire-ball sunsets—but they are tough to get right on the first try, unless you use time-saving smartphone apps which help you find the best metre-accurate location to shoot from. They show you the line of sight for sun or moon activity on any given

date, time and location in the world. If you want a glorious sunrise to the left of the outlandish Burj al Arab hotel in Dubai, programs like Sun Location for Android or The Photographer's Ephemeris for iPhone will make sure you are in the right spot at the right time—and more.

Here are examples of how this smartphone precision photography worked for me last year.

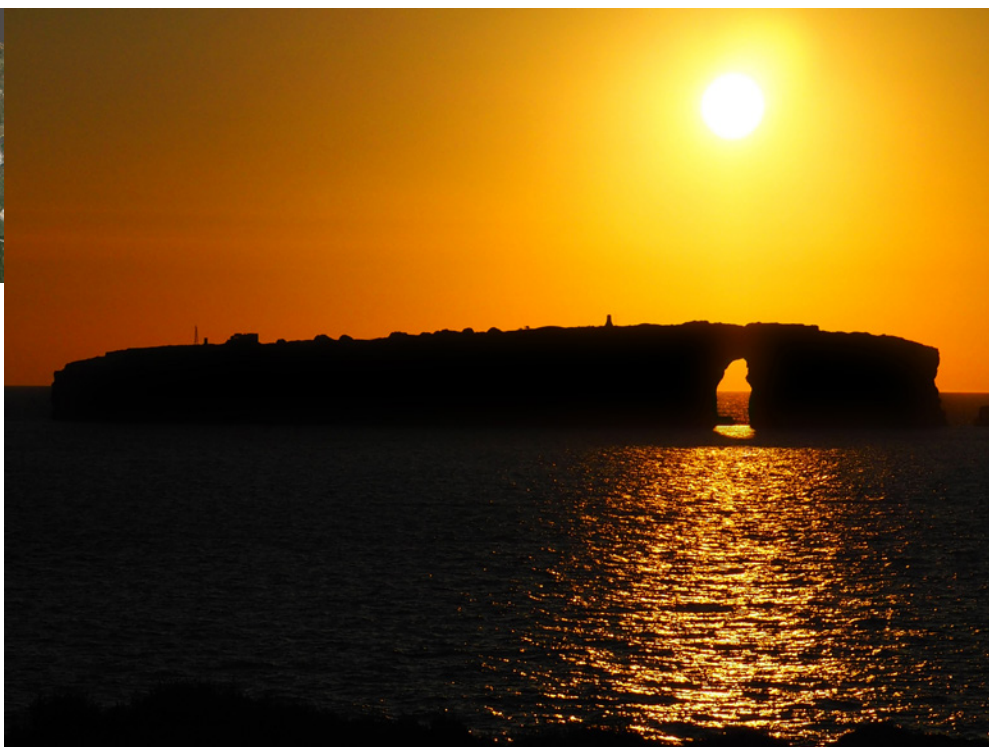
- During a three-day visit to Cadiz in southern Spain, my eye caught a modern lighthouse next to the old Castle of San Sebastian at the far edge of the beach. I hoped to get the sun setting against both old and new watch towers, but the historical site closed early. The Sun Position app showed the line site of the setting sun against the two towers, but it was outside the castle walls, from rocks accessible only at low tide. Fortunately, another tide table app showed a low enough sunset tide on my last night in Cadiz. When onsite, I noticed a partially collapsed breakwall and fine tuned my shooting spot with my app to include both towers and the sun setting through the breakwall. The result was a 3-in-1 photo!



Green sunset line in Sun Location circles is positioned on map to intersect with the island arch.



Steve Makris specializes in applied technology. You can follow Steve's many adventures on his www.techuntangled.ca blog

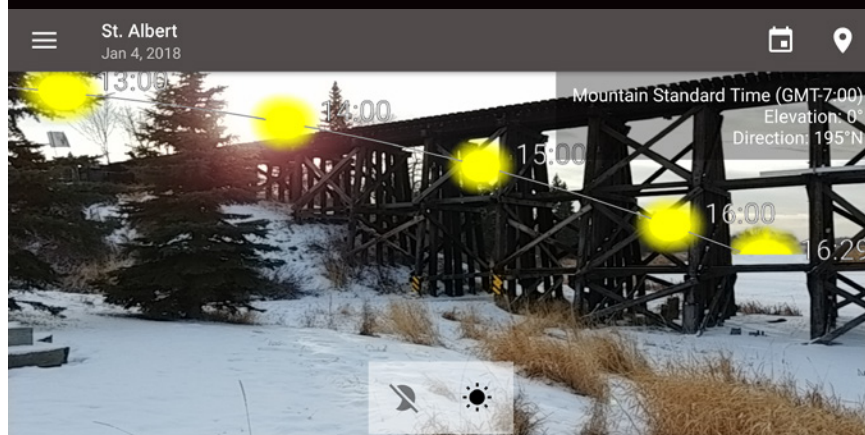




- I had more time to plan a challenging sunset photo in southern Greece, off the harbour of Pylos. Early online research at home showed a breathtaking and often photographed natural arched water passage on the 300-meter long French Monument Island. Again, the Sun Position app showed me the ideal spot to line up the sunset with the arch, but getting there became my photo mission from hell, requiring an off-road 4-wheel drive, gingerly bum-sliding across a rotted ravine pipe bridge, and walking through thorny bushes with hidden rocks. I lost one of my sandals and broke my walking/monopod stick while focused on my mission. My photo, showing the sun reflecting through the arch on the other side of the island, was well worth the trouble.
- The Sun Location app also helped calculate the ideal time for best sunlight on the romantically famous Puente Nuevo Bridge in Ronda, Spain. Its 120-metre high face, nestled between steep cliffs, is partially shadowed most of the time. The app's onscreen sun dial showed that the best time to shoot the bridge with full sun was at 3:45 pm!

TIPS

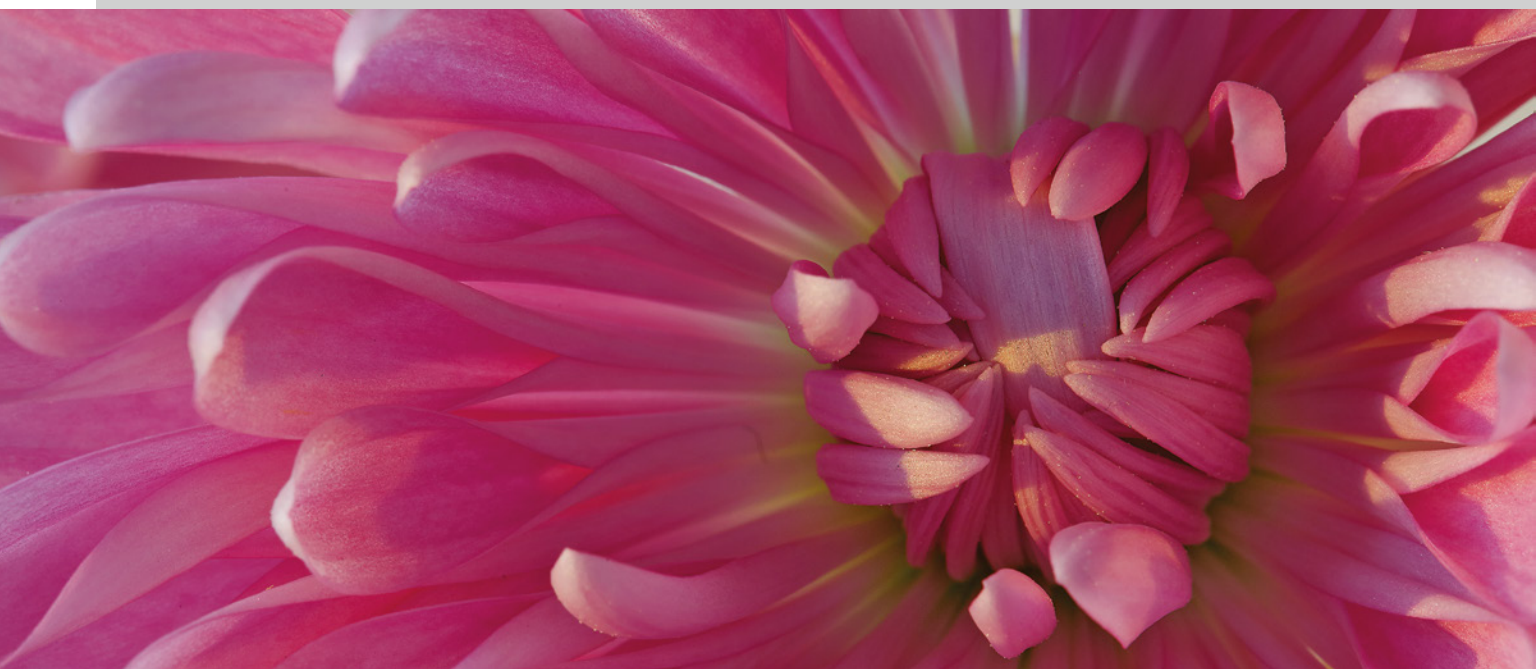
- Sun and moon programs use common tables for planet movements with different interfaces. Most overlay their information on Google Maps in different viewing modes as well as their own specific features. Read reviews to become familiar with the subtle nuances of each app.
- Some apps are free, usually working only on the day you use them, but they often require a one-time phone transferable and affordable \$5-\$11 upgrade to work any day of the year, with more options.
- A must-have Augmented Reality feature shows the live sun path overlaid on wherever you point your phone screen.



TECHNIQUE

BY DANIEL DUPONT

Macro Photography



The Tamron 90mm f/2.8 lens offers an impressive sharpness that you will notice by observing the centre of the flower. You will appreciate the minimum distance of just 30 centimetres, which is very useful for making photos in your flower beds. I adjusted the exposure by using the rear LCD screen and manual mode. I subsequently decreased the flash power by -1 and used a silver reflector to make the pink petals more radiant. *Tamron 90mm f/2.8 II; 1/6 second, f/16, ISO 100, Metz ring flash at -1 EV, silver reflector, Vanguard Alta Pro 283 CT tripod with TBH-100 head, remote control and level.*



Daniel Dupont is a professional photographer specializing in nature photos. He has taught photography at a CEGEP in Quebec for nearly 25 years.

The author of seven books, including three technical books, he has hosted many workshops in North America and South Africa.

To view more of Daniel's work, please visit www.danieldupont.ca

Macro photography and studio setups have many aspects in common. Both genres require a mastery of photographic technique and ideally the use of an artificial light source. You can approach a macro assignment as an adventure in setting up a miniature photo studio, using magnification and light to discover minute details in a wide range of subjects that are too small to be perceived by the naked eye.

Many photo enthusiasts carry a macro lens or a lens with close-up capabilities in their camera bag.

Magnification Ratio

For practical purposes, we can define a macro lens as a lens that is able to reproduce a life-size image on the camera sensor—for example, a subject that measures 36mm from left to right will appear as a 36mm wide image on the sensor. This is referred to as a 1:1 magnification ratio. A close up lens may be able to reproduce an image that is one-quarter life-size—the 36mm subject will only appear as a 9mm wide image on the sensor.

The minimum focus distance is an important consideration when selecting a macro lens. For example, the Tamron SP 90mm f/2.8 lens that I used for several of the photos



Macro photography allows us to create artistic images. Looking at the photo below, it is difficult to identify it as an ice sheet. The lines and curves show air bubbles trapped in the ice. To capture this image, I held the ice with a clamp and positioned a camping mat in the background to add colour to the frozen water.

Tamron 90mm f/2.8, 1/3 second, f/8, ISO 100, silver reflector, Vanguard Alta Pro 283 CT tripod, TBH-100 head, remote control and level.



illustrating this article, has a minimum focus distance of 30 cm. This allows you to keep a reasonable distance between the macro subject and the front of the lens. A 60mm macro lens may also produce a 1:1 magnification ratio, but the lens-to-subject distance will be closer, and this may create additional challenges when lighting and photographing subjects like insects.

When the lens manufacturer specifies the minimum focus distance, this measurement is calculated from the sensor in the camera body to the subject and not from the front end of the lens. Most cameras have a symbol on the top of the body indicating the focal plane or sensor position, and this is used for precise measurement when planning a macro setup.

Extension Tubes

You can achieve macro reproduction ratios by adding an extension tube between a lens and the camera body.

Extension tubes are often sold in sets of three different lengths, with a camera specific lens mount on one end, and a matching body mount on the other end. Extension tubes do not have any optical elements—they increase the lens magnification capabilities by extending the distance between the rear element of your lens and the camera sensor. Some extension tubes incorporate the same electronic contacts as your camera and lens, which allows you to use the camera's auto exposure modes. Some of the extension tubes also have autofocus couplings. When you use an extension tube you can reduce the distance between the lens and your subject, and achieve sharp focus.



Macro photography allows us to create interesting artistic images, escaping from our usual comfort zone to expand our creativity. To get a good depth of field and assure that the pistils were sharp, I positioned the tripod parallel to the subject while selecting an aperture of f/22. By decreasing the power of the flash, I made sure that the pistils were not overexposed. I used a golden reflector to achieve a warmer lighting effect. 100mm f/2.8 II; 1/30 second, f/22, ISO 100, ringflash, golden reflector, Vanguard Alta Pro 283 CT tripod, TBH-100 head, remote control and level.



When you use an extension tube in conjunction with a macro lens, you can increase the magnification ratio of the macro lens, often to double life-size or greater, depending on the focal length of the lens. The only limitation is that you can reach a point where you are so close to your subject that there is no space left to light the image.

Multipliers

The multiplier (often referred to as a teleconverter) is a tube containing lens elements that optically magnify the power of your lens. Teleconverters are often used for long-range photography, but they work very well with normal focal length lenses. They also work well with macro lenses—letting you increase the working distance between the camera and your subject. Teleconverters are available in a range of magnification power, generally 1.4x, 1.7x, 2x, and 3x.

The downside of using a teleconverter is that there is a reduction of light transmission that is equivalent to the power of the optics—so a 1.4x teleconverter reduces the light by 1.4 f/stops, a 2x model reduces the light by 2 f/stops, and so on.

The advantage of using a teleconverter in conjunction with a macro lens is that you effectively increase the focal length of your macro lens without changing the close focusing distance. For example, when you use a 1.4x teleconverter with a 100mm f/2.8



For this shot, I used a Vanguard Alta Pro 283 CT Tripod, with a central column that swivels and can be offset. This is very useful feature in a tripod for macro photography.

macro lens, you get the equivalent of a 140mm f/4 macro lens—ideal for photographing insects from a more comfortable working distance.

Some teleconverters have a lens element that may interfere with the rear element of some macro lenses—you should check the compatibility of the two components—if the lens and teleconverter are not compatible, you may be able to use an extension tube between the lens and the teleconverter to achieve a working combination.

Macro Lenses

Macro lenses come in a range of focal lengths. On a full-frame DSLR I prefer the macro lens models from 90mm to 100mm, as I find these to be most appropriate for photographing flowers and insects. On an APS-C or DX format DSLR, a 45mm or 60mm macro lens will produce similar magnification at similar camera to subject distances.

On a full frame or FX DSLR I find that the 50mm and 60mm macro lenses are less suitable for insect photography, since the minimum focus distance is reduced, and the lens can create a shadow on the subject. These lenses will work well when you use a macro flash.

Exposure

I create the majority of my macro photos using natural light and manual exposure mode. After adjusting the exposure, I reduce or eliminate the shadows with a macro ringflash and a reflector.

The flash allows you to get brighter colours and reduce the shadows that often affect macro images. The reflector allows the shadows to be lightened and creates a more natural lighting effect. I use a small reflector that does not intimidate insects and it is less prone to movement in a breeze when I photograph flowers outdoors.

Macro Flash

The macro ringflash flash is designed to be mounted on the front of your lens, ensuring a well-distributed light on your subject. If you try to use your standard hotshoe flash on-camera in a macro setup, the light beam will probably go right over your subject, and if you angle the hotshoe flash head down, you often

have the front of the lens casting a shadow on the subject. There is also a limit to how close you can place a standard hotshoe flash to your subject—these flash models are often too powerful for macro work—you may have to dial-in two or more stops of light reduction to use these flashes to light subjects at very close range. The macro ringflash, on the other hand, is specifically designed for extreme close-up work, and it literally unlocks a world of macro photography, making every image a creative masterpiece.



I used a Metz 15 MS-1 ringflash for several of the photos shown here, and I was seduced by the ease of orienting the two flashes of the ring to focus the lighting on close-up subjects. I also liked the diffuser that can be positioned on the flash to distribute the light evenly, and control the contrast of light from one side or the other. You can also reduce the power of one of the two flash tubes in order to recreate the natural light coming from the left or the right. You can turn off one or the other of the flash tubes to get the effect of a single light source.

What fascinates me in macro photography is the possibility of photographing a universe that differs from our everyday life. I discovered these mushrooms in my garden, and to simplify the shooting, I dug them up with a shovel and deposited the clod of earth on the recycling bin. This let me work at a comfortable height, instead of having to get down to ground level.

When I work in my own garden, I always have scissors in my photo vest so I can trim the foliage that may obstruct my view of the subject. Once I have adjusted the subject, I position my tripod in front of the tray of flowers and I raise the centre column half-way. I fine-tune the height adjustment of the tripod center column, which allows for a quicker and more accurate adjustment than adjusting the tripod's three legs. I positioned the recycling bin in front of a cedar hedge to obtain a uniform and luminous background. After adjusting the exposure and framing by using the rear LCD screen, I adjusted the power of the flash. 100mm f/2.8 II; 1/5 second, f/22, ISO 100, ringflash, golden reflector, Vanguard Alta Pro 283 CT tripod, TBH-100 head, remote control.



CANADIAN  ANGLES
BY MICHELLE VALBERG

Discovering Northern BC



Michelle Valberg studied photography at the University of Ottawa and Algonquin College and self-published two books on black and white photography – *Look Beyond... The Faces & Stories of People with HIV/AIDS* (1996) and *Dare to Dream... A Celebration of Canadian Women* (2000). Follow Michelle on Instagram – @michellevalbergphotography

We found ourselves staring at the trees in silence. None of us could understand what we were seeing. Was this real? Softly, Captain Tom murmured, "It appears we are looking at the back side of the shadow." The sun was rising over the mountain while the fog was lifting through the tree line. The trees in front cast their shadow on the fog. I never imagined seeing anything so mystical and beautiful!

It was sunrise in the Khutzeymateen and we were photographing the grizzlies. The sun came up over the mountain, casting a shadow of the trees on the low lying clouds. Our guide Tom told us that we were on the other side of the shadow. This was an incredible experience.

This was just the beginning of my fantastic adventure through the Khutzymateen Grizzly Bear Sanctuary and the Great Bear Rainforest. This past summer and fall, my travels into Northern B.C. provided me with the most prolific photographic opportunities I have ever experienced.

Most of Northern BC is protected and preserved by provincial parks, sanctuaries and nature reserves. Shaped by volcanic fire, the majestic mountain ranges dominate the northern BC landscapes. The heavily forested valleys that lie between these ranges were



We were making our way by zodiac through a beautiful inlet when I realized that these creatures were not tree stumps in the water. I love the eye to eye contact and the expressions. My go-to combination was the Nikon D850 with the 200-500mm.



once carved by glaciers. Countless shades of green blanket the exquisite landscapes. Whether you look to the ocean, the air, or the land, the fauna is unrivalled in its abundance.

The cultures of Canada's Indigenous peoples are rich—from Haida to Tsimschian. Words like ethereal, majestic, and magical come to mind when trying to describe this region. Despite the strong images that they conjure up in your mind, none of these words can adequately describe the raw rugged beauty that surrounds you.

Aboard the 71-foot sailboat "Ocean Light II" we explored the largely untouched and wild coastal islands and inlets from Terrace to Bella Bella. In the fall, the streams were teeming with returning salmon. The elusive Spirit bears, black bears, and grizzly bears feast on the harvest. There are small critters as well, like the ever elusive pine marten, and birds—so many species of birds. In the pristine waters you see a variety of whales including orcas and humpbacks, as well as seals, porpoises, sea otters and fish groups far too numerous to mention. The abundance is overwhelming. So too, is the rain.

They call her Ma'A. She is a 17-year old spirit bear in the Great Bear Rainforest. She stood in this spot right in front of us for at least a half hour. Since she was so still, I decided to do a longer exposure. My 800mm was on tripod down the river (I left it there to follow her upstream) so I positioned my Nikon D5 with the Nikkor 70-200mm on a tree stump, held it in place, and used a 1/4 second exposure to get the water movement.



Photographing in the rainforest is difficult and demands patience. The rain can be relentless. Keeping yourself and your equipment dry is a constant challenge. Wearing the right gear is essential. Even the best waterproof jackets prove fallible after countless hours of drenching downpours. Forget gloves—you can't keep your hands dry and work your camera. Your hands are likely to get quite waterlogged, but at least it isn't in freezing temperatures! Dry bags are essential, and being armed with loads of cleaning cloths and towels is a wise move. The rain makes for some beautiful imagery, from the texture on the fur of the animals to the soft lighting. It is worth braving the elements to get your photos—as long as you are well prepared.

On this journey I was working with the new Nikon D850—mostly paired with the Nikkor 800mm. This is an awesome combination. I was blown away by this new camera and its

capability with a 45 megapixel sensor. Even in the low light, I was comfortable shooting at higher ISO's but I also had the D5 on the go for very low light situations. With no opportunity to use my tripod on the moving sailboat and zodiac, I was thrilled to have the 200-500mm as my primary lens. I was very impressed with the sharpness of this lens, and I appreciated the added reach of 500mm. However, at times, the animals were so close that the 70-200mm zoom was the lens of choice. Also in my bag were the 14-24mm and 24-70mm for the outstandingly beautiful landscapes, mountains and waterfalls.

A mother and her cub made their way along the river bed, looking for salmon in Mussel Inlet. She was a fierce hunter and her cub was anxious to share the catch. Photographed with my new favourite combination—the Nikon D850 with 200-500mm zoom.



I was photographing two spirit bears from the shore of the river with the Nikon D850 and Nikkor 800mm prime lens on my Vanguard tripod when this pine marten almost jumped right into my frame. He stopped and posed for only a second (with beautiful light) and I quickly grabbed some frames.



The light can change in an instant when you travel through this magnificent region. One minute you are in the pouring rain, and then the sun bursts through the clouds. Being aware of your settings is important, and being out on deck and ready for any photo opportunity is crucial to getting that once-in-a-lifetime shot. My image library has expanded beyond my wildest imagination. There were photo-ops every minute of every day, no matter the climate. Even the dark skies were illuminating.

Photographing in the rainforest has become another obsession for me. Skies filled with eagles soaring high above you, or swooping down so close you can hear and feel the movement of their wings is simply breathtaking. Watching the pods of whales escorting your Zodiac through the channels is nothing short of magical. Close encounters with grizzly bears eating salmon beside your zodiac and spirit bears so close you can see their breath is incredible, and when you think you have had a day to remember, the porpoises arrive to ride the bow wave and sea otters cheekily cruise by your boat. All of these attractions, in an environment filled with mind-blowing scenery, makes this region truly remarkable. There isn't anywhere on the planet like it—and I can't wait to go back!

We were surrounded by Orcas surfacing all around us. I kept my eye on a small group of whales that were closely riding the shore. With the Nikkor 200-500mm I had the flexibility to be mobile while getting good reach—this is a full frame image.



We toured the BC coast aboard a sailboat called Oceanlight2 and went out each day on the zodiacs in search of the amazing wildlife in the area. In this photo you see our boat in the background while a grizzly eats a salmon in the foreground. The early morning light was glorious.

PERSPECTIVES

BY KRISTIAN BOGNER

Focus Shift



This year marks the 75th Anniversary of **Bogner Photography**. For more photography tips and videos check out Kristian's photo blog at kristianbogner.com or sign up for one of his photography courses in the Rocky Mountains and throughout Canada. Coupon code for PhotoNews Subscribers is: **pnewsbogner75**
photographicrockstar.com



Have you ever wanted to capture macro photographs or landscapes with perfect detail and sharpness throughout your image but you just didn't have enough depth of field? The new Nikon D850 has an amazing new feature called Focus Shift that can accomplish this with ease. You can set the camera to take a series of 2 to 300 images where the camera will micro-adjust the focus automatically. Then you can use Helicon Focus, Adobe Photoshop or your favourite focus stacking tool to combine the images, or you can manually stack your layers to get perfect focus throughout your image.

Camera Settings

My initial camera setup is similar to normal shooting. I generally shoot RAW and fine tune my sharpness, clarity and saturation using the picture control settings in-camera. For this technique, autofocus must be turned on, and I set my initial single focus point to the closest foreground part of the subject that I want to be in focus in my final focus stacked image. Then, in the photo menu on my Nikon D850, I go to the Focus Shift area, set my number of shots, set the focus step width, and the interval between shots. I almost always use manual exposure settings, but if I selected aperture priority, turning on the setting for exposure smoothing would be a good idea.

These settings will change depending on your subject, lens, distance and depth of field, so I recommend doing some tests. Again, start your exposure at the closest foreground point of your subject and then start focus shift. Let the camera take your desired number of shots and refocus automatically throughout the series, and then take a look at your last exposure after the process has finished, or look through the viewfinder to ensure that you took enough shots to get the back part of your subject in focus. If not, you can add some more shots to the focus shift setting, or you may need to start the process again with more shots.

I set the camera to put each new focus stack into its own starting storage folder, so I don't get any test photos confused with my focus shifted images, and then I can just stack the images right from that folder into whatever software I am using to create the stack.

I would definitely recommend a stable tripod for focus accurate focus

shift results. If I am not shooting with flash, using silent mode is a great idea—this will ensure that there is no camera shake by using the electronic shutter. Another option is to use Mirror-up mode.

Macro Focus Shifting

Focus shift is a spectacular asset for creating amazing close up images. To get the images shown in this article I experimented with several different methods, and I found that one of the easiest and best combinations was simply to use my Nikon 105mm VR Macro lens with several autofocus extension tubes to allow me to focus closer. This technique will work with any lens as long as the extension tubes have autofocus capabilities. For some of my images, the bug was only the size of my fingernail and I was able to get a full frame image with this setup. I set the camera to use a narrow focus step width, and for the various photos I set the focus shift to take between 100 and 220 frames to get a full range of focus. I shot at an aperture of f/8 so be sure to have good depth of field and excellent lens performance for each shot.

Another cool option for extreme close ups is to use a lens reverse ring to attach a 50mm lens to the front of a 105mm VR Macro lens—this allows you to focus at extremely close range. Focus Shifting works really well for close up product subjects like jewellery, and you can use the technique to photograph large products, where you want incredible depth of field and really sharp lens performance.

Lighting Considerations

If you are triggering flashes as you take the multiple images for a focus stack, I would recommend giving a bit of a delay between shots, because 200 consecutive shots can cause your flash to overheat or give inconsistent output.

Landscapes and Architecture

I find that most of my landscapes have enough depth of field to capture nice sharp foreground, middleground and background at about f/11 with a wide angle lens, but in certain instances where my foreground is close to the camera, I find that focus shift can substantially enhance the impact of the final image. This is especially useful when I have a composition with a foreground element like a flower that is really close to the camera position, and I want the distant background to be in focus. For landscapes, I find you can use a much wider focus step width and take just 2-5 shots to get a great full focus range. This technique is also great for architectural shots, and it can save you hours of post-processing compared to the manual operation of combining images in Photoshop.

Focus Stacking Workflow

Once I have my images loaded up in my favourite software application, Nikon View NX-I or Lightroom, I adjust one of the RAW images to my desired colour correction and copy those settings to all of the images in the stack. Then I export to a TIF or JPG and bring the images into my stacking software. I often use Helicon Focus—this is an amazing application with three different stacking modes: weighted average, depth map, or pyramid. Each mode has its own advantages, and I sometimes blend more than one of the

Focus shift shooting

Start

No. of shots	220
Focus step width	3
Interval until next shot	8"
Exposure smoothing	OFF
Silent photography	OFF
Starting storage folder	



Interrupt—OK



modes. For insects or complicated subjects, pyramid stacking mode is my favourite setting. Helicon Focus offers a free 30-day working trial of the software.

Another software solution is to use Adobe Photoshop and the Auto-Blend option after you use scripts and load the images into a stack. This method will focus stack the images and it will also align them, which is very helpful if you moved very slightly while taking the photos. Finally, you can manually stack images by adding them to layers and creating your own masks with each layer, but this could be a very tedious option if you have many images in your stack.

Final Post Processing

Stacked images sometimes come out perfectly, and sometimes they need a bit of minor touch up in post, especially if the focal length of your lens changes slightly while you adjust focus. For some subjects I try different methods, and blend parts of each series of images using Photoshop.

Modify this Process for Any Camera!

While the Focus Shift setting is a cool new feature of the Nikon D850, you can experiment with a variety of techniques to achieve similar results with other cameras. You may have to manually adjust your focus to stack a series of images, and while this may take a bit of effort, you can get the desired results by using software and a controller like Camranger, or you can simply use a focus rail. The principles of focus shift and image stacking will be similar and many of the tech tips in this article will apply to help you get great images.

Focus shifting for image stacking definitely involves an initial learning curve and a fair amount of experimentation, but if you take notes as you develop your ideal

workflow you will be amazed at the results. Enjoy the process of mastering this great new tool, and soon you will be creating works of beautiful photographic art.



SPRING INTO...

BY TONY BECK

Nature & Wildlife Photography!

After a lengthy Canadian winter, who's not ready for a little warmth and vitality? For nature and wildlife photographers, spring is the most anticipated season. Keen to end the winter doldrums, we welcome the comfort and excitement of a rejuvenating spring.



Photo by
Nina Stavlund

Freelance photographer **Tony Beck** describes himself as a "naturalist", specializing in a wide variety of wildlife and nature subjects. Based in Ottawa, Ontario, Tony and his wife Nina Stavlund operate a small company called "Always An Adventure" offering a variety of photography, nature, birdwatching and tourism related services including workshops, courses, excursions and short trips. For more information please visit alwaysanadventure.ca/



Adult Red Fox Sparrow – Magdalene Islands

Adult male songbirds announce their breeding territory with characteristic songs. If you learn to recognize each species' unique vocalizations (like this Red Fox Sparrow), you will be in a better position to capture images of actively singing males.



Male Common Grackle—Ottawa
Blackbirds, like this male Common Grackle, are among the first birds to return to breeding grounds in spring. Flocks typically arrive after the first thaw.

Sometimes, we interrupt the cold with vacations to tropical environments. However, this temporary solution requires a significant investment of time and resources. If we can't escape winter, we need to embrace its challenges while patiently waiting for spring – it's just around the corner, isn't it?

Although we have lost the benefits of winter's reflective blanket of snow, the new season brings other virtues. As the days get longer, we enjoy increased opportunities to capture images. Set your alarm clock for pre-dawn if you want to be in the field during the most productive times for nature and wildlife photography – the golden hour after sunrise.

Challenges of Spring Photography

While we no may longer worry about sub-freezing temperatures, when spring comes to Canada we have to be aware of other camera-killing drawbacks like rain, dirt, mud and pollen. Depending on your location, wet conditions frequently accompany a winter thaw. In spring, you instinctively trade your thick thermal layers and snowshoes for rain gear and rubber boots, but do you ever think about keeping your camera warm and dry after winter has faded from the scene? When you plan your field trips you should include protective covers for your camera equipment. A simple umbrella has numerous advantages. While exploring local environments, beware of snow-covered fields melting into floodplains, deep shorelines, treacherous back roads and muddy trails. As always, study weather forecasts and prepare accordingly.

Spring Brings New Life

All around us, the warmth of spring triggers a new cycle of life. Vegetation grows as snow recedes. Plants waste no time emerging with the first exposed soil. Meanwhile, many animals come out of hibernation, including cold-blooded reptiles, amphibians, various invertebrates and a few mammals. After spending the winter in warmer climates, birds and some butterflies return to their breeding grounds for

the spring. Some birds moult from their drab winter plumage into bright breeding colours. Courtship and territorial behaviours dominate the new season. Vocalizations and territorial songs can sometimes wail all night—and the songs of nature do not just come from birds—for example, courting frogs become fairly noisy, especially around wetlands. All this activity makes for a bounty of photo opportunities.

Time to Spring Ahead

Daylight Savings time can throw off a photographer's momentum. You can argue the benefits of this long-standing tradition, but there's nothing much you can do about it. Simply pay attention to the clock, be in the field as early as possible, and take your time while you're there.

There is always a transition period during seasonal changes. As over-wintering birds leave for their northern breeding grounds, neotropical migrants return to their nesting territories in Southern Canada. The timing of any wildlife activity depends on location and weather. With all this wildlife activity in flux, don't be surprised to observe animals out of their normal environment.

Showy Lady Slippers with European Skipper—Eastern Ontario

Spring blooms on forest floors need to emerge quickly before the woodlands develop a thick canopy that blocks out the sun. Take advantage of this phenomenon during the early months of spring.



Signs of Spring

The first signs of spring in Eastern Ontario occur when numbers of Horned Larks increase over open agricultural fields. This typically happens in late February or early March. The first thaw following this phenomenon reveals huge flocks of migrating birds arriving to open water, open fields or forest edges. This leading wave of migrants typically includes blackbirds, waterfowl and others. They continue arriving for the next few months. By the end of April, we expect the second wave to arrive – insect-eating migrants returning from South America. This includes colourful birds like wood-warblers, thrushes, tanagers, orioles, swallows and others.

Hummingbirds and other nectar-feeding birds time their arrival with the emergence of blooming flowers, typically in May. A few wood-warblers and High Arctic nesters are among the last spring migrants seen in Southern Canada. Sometimes, northern breeders arrive in early June while still en-route to the Arctic.

Male birds on territory are highly focused. Their determination to find a mate and repel competitors often makes them easy to approach. When they are defending territories, it is wise to approach them stealthily for a photograph. In such situations, relax, and move slowly forward as smoothly and quietly as possible. If your subject doesn't want to cooperate after two attempts, you might as well save your energy and move on to a different subject.

Close-up Photo Opportunities

For macro enthusiasts, late spring is perfect for capturing great images of small subjects. Macro lenses help you fill the frame with strong compositions of buds, catkins, fresh leaves, flowers, small animals and natural still life.

Biting insects like mosquitoes and black flies emerge with warmer temperatures. They are an annoying problem throughout the country, even in the High-Arctic. Ticks in Southern Canada are a more recent threat, sometimes carrying disabling illnesses like Lyme Disease and Rocky Mountain Fever. The threat varies depending on location.



Northern Leopard Frog—Ottawa

Spring is a great time to dust off your macro lens. With insects, frogs and blooms emerging with the new season, there is no shortage of subjects to photograph, especially after a long Canadian winter.

It is essential for any outdoor activity to use insect repellent that contains "deet". Before exploring an area, check local information regarding diseases and their risk levels. It is also helpful to conduct a "tick check" each evening after an excursion into the great outdoors.

Wildlife in the Spring

With the warmer months, many mammals like Moose or Caribou shed their winter coat. By spring, they can look unkempt and dishevelled, with clumps of loose hair hanging from their body. They look significantly more polished once summer arrives.

Early spring can lack colour, at least until later in the season. Dominated by browns and greys, thawing snow usually looks messy and unattractive. Pristine scenes might be easier to find after fresh-fallen snow, or once the vegetation has fully emerged, but never stop looking. With luck and persistence, you might find attractive pockets of colour and contrast, especially on the forest floor, or along a forest edge.

So say goodbye to winter's silence and embrace the new season's abundance of colour, energy and life. For nature lovers, spring is the most exciting time of year!

Hummingbird Clearwing Moth on Lilac blooms—Newfoundland

Reptiles, amphibians and insects burst onto the scene after the snow has vanished. Look for their activity on warm calm days.



Cactus[®]

RQ250

Wireless Monolight



A 250Ws, battery-powered, bare-bulb monolight with detachable reflector. Supports wireless TTL and High Speed Sync (HSS) on Canon, Fujifilm, Nikon, Olympus, Panasonic, Pentax and Sony camera systems.

Full seamless integration with Cactus V6II and V6IIs.

Engineered for location shooting.

Pricing and availability Summer 2018

Explore more possibilities at www.cactus-image.ca



aurora Lite Bank[®]

C LUX

C LUX is a palm-sized LED light with integrated LiPo rechargeable battery!

- 10w power consumption and 3700Lux at 0.3m
- Two settings - half or full power
- Up to 1 hour run time
- Integrated cold shoe and 1/4-20 adapter
- Use C LUX as a modeling light facing into or out from Firefly II with included adapter.

...with Firefly II...



Use C LUX on your video camera...



...or your DSLR!



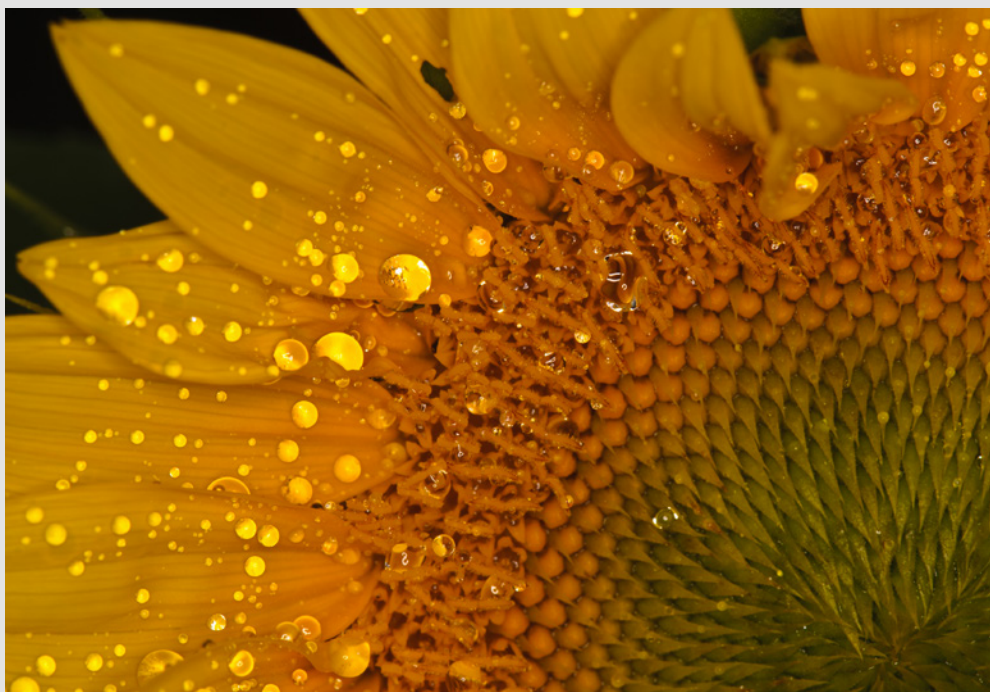
www.auroralitebank.ca

FLASH 101

BY WILL PRENTICE

Illuminating the Macro World

When I first bought a macro lens, I was so amazed with all the new things I could photograph that the lens stayed on my camera for three straight months. I photographed anything and everything with that macro, and then I looked at my images to see how I could make them better. As with all photography, the common theme was light – I needed better control of the light.



Sunflower

Photographed outdoors right after a rain storm. I used a macro ringflash for a flat light that shows off all the detail and water drops.

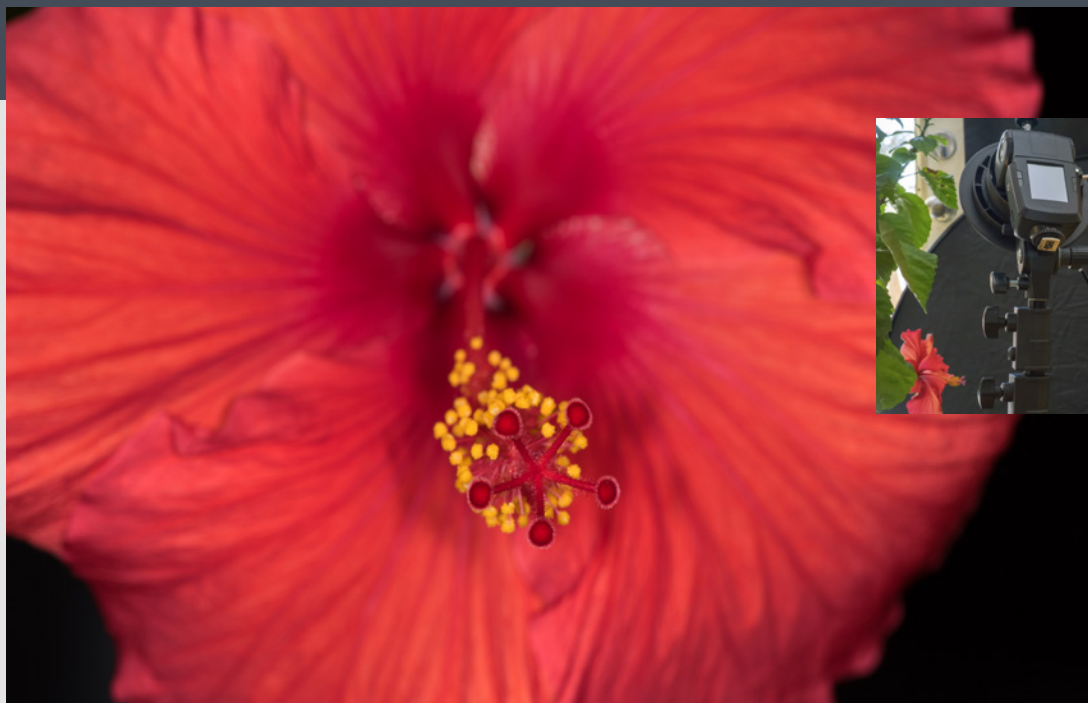


Will Prentice is a portrait and landscape photographer. He likes to share his knowledge, and a few laughs, at camera clubs across Canada. He's also the host of PHOTONews TV on YouTube. For more of his work and bio, check out www.capturaphoto.ca

In this article, I will show you some common and not so common methods for lighting close-up and macro subjects.

My test subject was a gorgeous red hibiscus that blooms regularly. I started with my camera securely mounted on a tripod and macro lens set to manual focus. Settings were ISO 64, aperture at f/11 and Aperture priority mode, with auto White Balance so the camera would choose the best shutter speed to maintain exposure and the appropriate White Balance setting for the incoming light.

It was a bright, sunny yet frigid -24°C day – perfect for natural light to stream in through my patio door! The first image was lit with direct sunlight – it's punchy, yet very contrasty. The shadows are deep, dark and plentiful. The sun is a pleasing 5,500K, which leads to nice accurate colours.



Hibiscus

Photographed indoors with the Tamron SP 90 macro lens and Metz 15 MS-1 Macro flash. I used the Aurora Lite Bank Multi Disc 5-in-1 reflector with the black side facing the flower to block sunlight and provide negative fill.

The challenges with using sunlight revolve around controlling the direction and intensity of the light. Unless you're Rembrandt, it's difficult to only work at certain times of the day!

I brought in a large Aurora Lite Bank reflector with silver fabric, which allowed me to bounce some light back into those shadows and soften them slightly. There is still significant contrast to create a nice image.

My next image involved diffusing the sunlight. There were no clouds in the sky, so I removed the reflective material from my 5-in-1 reflector to use the centre diffusion fabric between the hibiscus and the sunlight.

Overall light on the flower is still very pleasing and there are enough shadows to create interest. Unfortunately, the background has popped out due to the longer shutter speed required.

Next, I went with an off-camera flash for fill – I chose the Metz 64 AF-1 as it has enough power to combat the direct sunlight. The fill flash, camera left, reduces some of the dark shadows and keeps the background nice and dark. However, the shadow from the pistil is still distracting.

The best way to eliminate the harsh shadows from the sun is to take control with off-camera lighting. I closed the curtain and used the reflector to block out the natural light.

There are flashes designed for macro work, such as the Metz 15 MS-1.

These are great for getting detail in your macro subjects and, since you are using a flash, you can use a shutter speed fast enough to keep the background dark and unobtrusive.

The Metz 15 MS-1 uses two flash tubes and you can adjust the ratio of light between the two sides. You can rotate the flash and control exactly where you want the light. This allows you to shape and adjust the lights and shadows – you can "hide" the shadow from the pistil, yet keep enough shadows on the petals to add dimension.

What about using an LED light source? LED lights are a great addition for macro work, but they come with a few caveats. LEDs are ideal for seeing exactly how your image will look – you can move them around and follow the play of light and shadow until the lighting effect is exactly what you want. The biggest drawback to LED is intensity – they only emit 1/4 - 1/10 the light of a flash! For this reason, I don't use LED when there's bright sunlight involved – it's hard to get the results I want with so little light being added.

Dandelion

Lit from behind and above by a Metz 52 AF-1 speedlight.





Where the LED lights shine is in a studio and/or a controlled environment. For my portrait of the LEGO® Photographer, I used a piece of white plexi and two C-LUX LEDs from Aurora Lite Bank. The C-LUX positioned at camera left was at half power as my key light. A second C-LUX at camera right allowed me to add highlights to the curves, crevasses and shapes of the figure, its hair, and the camera. For this shot, LED lighting was the right choice as I could visualize the image in-camera before hitting the shutter release.

The title image – children's wooden blocks formed to create letter shapes – was lit with broncolor studio lights. I chose the broncolor lighting system because I had to photograph all 26 letters, both upper and lower case, and 10 numbers. Each character needed to be lit exactly the same as those before and after – colour temperature and light intensity needed

to be precise unless I wanted to Photoshop every single image. Speedlights and LEDs aren't that consistent – even most studio systems aren't as accurate as the broncolor is for both colour and output.

Most studio lighting systems don't lend themselves well to macro work, but broncolor has a great selection of light shapers specifically for macro and close-up work. I used the Picobox for an even background, plus two Picolites with Projection Attachments for precise light control.

There is no singular lighting solution for macro images. The choice is yours.

Multi or 5-in-1 reflectors are a must-have for macro photography. On a bright, sunny day, you can create soft diffusion anywhere. On a cloudy or partly-cloudy day, you can use the white or silver to bounce a bit of fill light back onto your subject.

If consistency is important, but not paramount, speedlights and macro flashes are my preferred choices. I have the ability to place the light wherever I need it, to shape it how I want, and I can use fast enough shutter speeds to keep the background dark and unobtrusive.

There are still a few months of cold winter weather for you to practice your macro lighting indoors where it's warm and dry. You'll be ready for a spectacular spring macro adventure when the flowers start to bloom outdoors!

To capture detail in the stigma and anther of this white and purple tulip, I held my Metz 44 AF-1 above and behind the white petal – I used the petal as a diffuser.

www.canamphotoexpo.com



Aaron Nace

Education for all.
Three levels of classes
from beginner
to expert.

Matt
Kloskowski



Just to
name a
few

Ten separate
photographic genres
to choose from with some
of the best
instructors in the world.

Landscape
Macro
Wildlife
Post-Production
Portrait & Fashion
Event & Video
Wedding
Business
Maternity
Boudoir
Baby

Swiss Origin. Swiss Precision. Perfect Light.



Available exclusively from
these Canadian dealers

Strobe and Continuous Light

B3K Digital
Toronto, ON

Beau Photo Supplies
Vancouver, BC

Flashpoint Photographic Services
Vancouver, BC

McBain Camera
Edmonton, AB

PhotoService
Montréal, QC

Continuous Light

S1 Group
Toronto, ON

PRINTING 101 | PHOTO PRINTS

BY DAVID LIBRACH

The Perfect Inkjet Paper What to look for

The overwhelming majority of the photos we take today will never be seen in print, existing only as bits of computer code for the remainder of their life. That is an absolute shame.

Unlike a digital photo, prints exist in the real world. Your photos are free of restrictions and get to speak for themselves, unhindered by electricity, uncalibrated monitors and cell phone screens. The deep and incredible emotions evoked when viewing a photo that has been printed is unachievable with any other medium. It is an entirely different and unique experience for both the photographer and the audience.

I don't believe that photographers make a conscious decision to not print their photos. Instead, I believe they are intimidated by printing in general, and fear sets in. I don't blame them. Even trying to figure out what paper to use can be difficult and frustrating. Much more challenging than choosing the gear we use to take the photo in the first place.

Buying the right lens, for example, is a simpler, albeit more expensive task. That is because it is relatively easy for most photographers to read and understand the spec sheets produced by lens manufacturers. Aperture ranges and focal lengths are familiar terms and we understand the role that they play in our photos.

Life isn't that easy when it comes to analyzing the spec sheets for paper. Unlike a lens, paper is described in mathematical, scientific and artistic terms. Plus, the quantitative data uses terminology that is not found in other aspects of photography—and the qualitative data is open to personal interpretation, which is often hard to substantiate.

With some basic knowledge, you will be able to understand the characteristics of each paper, so you can narrow down your options before ultimately making some test prints.

Here is a quick guide to some key terms to look out for when choosing papers.

GSM (also referred to as the "weight" of paper)

Simply put, GSM is the weight of a paper as calculated in grams per square meter (GSM).

Most artists and art collectors prefer heavier papers as they are more durable and tend to produce a better print. Regular copy paper, for example, is around 80gsm. High quality photo inkjet paper often weighs two or three times as much (or even higher).

GSM can be especially useful when comparing two papers that have similar qualities (i.e. two gloss papers of different brands), the heavier of the two will tend to be of higher quality and produce a better print. Manufacturers use many different types of materials for papers. This will also have an impact on the weight so it is important to note that you shouldn't always choose a paper simply because it is heavy.

ILFORD, a company that has been producing traditional photo paper for over 130 years, and whose Galerie line has been at the forefront of digital inkjet printing, have papers in a variety of different weights. They produce several heavy-weight papers, such as the Cotton Artist Texture (310 gsm), but there are also some paper stocks that weigh almost two thirds less, like the Washi Torinoko, (110 gsm). Both are incredible and can produce stunning prints. The differences lie



David Librach is a fine-art photographer with a passion for printing and helping photographers explore the creative and technical aspects of photography.

in the raw materials, and this is what accounts for the difference in weight. The first is a traditional 100% cotton based rag paper, while the second is manufactured using traditional Japanese methods that give it the appearance and feel of handmade rice paper.

Brightness/Whiteness

The natural colour of a paper will dictate how white will appear on a print. This is because printers do not have a white ink and instead rely on the paper to portray it.

A bright white paper can be used with dramatic effect, especially in high contrast black and white prints. Portraits and landscapes taken during the golden hours can be more aesthetically appealing when printed on a creamier and warmer toned paper.

Other colours may be present in the paper. Metallic papers are becoming increasingly popular as they give prints a 3D effect, producing architectural and industrial images that are unmatched by any other finish. This type of paper often has a bluish or grey tint, which emphasizes the metallic look.

OBAs

The base material used in the manufacturing process has the greatest influence on the final colour of the paper, but optical brightening agents (OBAs) are sometimes added to help enhance these qualities.

OBAs are not unique to papers. In fact, they can be found in many other products including most laundry detergents because they help "keep whites, whiter". They have a similar effect when used in inkjet paper, allowing it to appear whiter than its natural state. However, the presence of these brighteners is controversial and their benefits are hotly contested by many photographers and printmakers. This argument can get quite complicated and scientific, but basically it comes down to the fact that the effect of these agents will diminish when exposed to UV light, causing a print to appear more yellow as the natural colour of the paper starts to come through over time. Depending on the amount of exposure to daylight, the amount of OBAs used and its location within the many



layers of a paper, the speed and severity of the changes can vary greatly.

Surface Finish

The surface of a paper will have the most impact on the final print, and the options for paper finishes are endless. Gloss or matt? Smooth or textured? Cotton or baryta? How about a metallic, canvas or even the rice paper mentioned previously? The choices are endless, and it would take the entire magazine to discuss each type of paper in detail.

It is also important to not limit yourself to paper made by the same manufacturer as your printer. Some of the best paper comes from third-party companies, and these papers are compatible with all makes and models of printers.

Some of my personal favourites are Hahnemühle's Fine Art Baryta and ILFORD Galerie's Gold Fibre Silk. These are two great traditional fibre-based baryta papers that can print deep rich blacks, smooth tonal ranges, and have a great gamut with excellent sharpness and contrast. These iconic papers have been around for a long time, and continue to be the main papers of choice for many artists and galleries throughout the world.

I also use a lot of non-traditional surfaces like the excellent Metallic Gloss, also by ILFORD Galerie. Sometimes I'll even take it a step further and print directly on an aluminum panel. You can do this if your printer has a flat feed (like in the Epson P600/800 series). I use the Allure Photo Panels by Breathing Color.

This is the same image printed on different papers. It shows the impact paper choice can have on the colours of your print.





FUSION 2018

THE CRAFT BEHIND THE IMAGE

SATURDAY, MAY 5TH, 2018
RIVER ROCK CASINO RESORT
RICHMOND, BC

Immerse yourself in photography!

Fusion 2018 is a full day of speakers, on-stage demos and an Industry Expo. The speaker series covers many aspects of photography including travel, portraits, lighting, printing your own images, and much more. The Industry Expo will run from 10AM to 5PM with displays and demos of the latest equipment. This is a great opportunity to ask questions and meet like-minded photographers.

www.beauphoto.com/fusion2018

See the latest equipment from:



At Beau Photo, we've seen many changes over the years, but our commitment to all things photographic continues.



Beau Photo Supplies
Vancouver, BC
www.beauphoto.com

Cameras • Film
Digital • Rentals • Advice

These aluminum panels have a special inkjet coating on one side which allows you to print directly onto the panel itself. The results are stunning, and are far superior to the dye sublimation prints on aluminum panels that are commonly used by commercial printers.

With all these choices, it can be challenging to know ahead of time the 'perfect' paper for printing a specific image. Like any photograph, the qualities that make a paper and print aesthetically pleasing are highly subjective. While I think that some of my pictures look incredible with a pronounced textured cotton paper, my wife prefers the punch and vibrancy when the same photo is printed on a paper with a glossier finish.

The only way to find out what you like best is to print the same photo on a variety of finishes, and compare them side by side. What makes a paper great for your holiday family portraits might not bring justice to the photos from your summer adventures. Of course, buying several packs or rolls of different papers can be a rather large investment when you just want to experiment with something new, and the last thing you want is to be left with hundreds of sheets of paper in a finish that you are not particularly fond of and will hardly ever use.

Decision Time

Thankfully, most paper manufacturers, including the ones mentioned in this article, produce an easy way to try a variety of papers without a large financial commitment. They conveniently bundle together different papers in a single 8.5 x 11 inch pack of paper with multiple sheets of each variety. These "sample packs" can be used with any printer. I find the 8.5 x 11 inch size to be ideal when trying new papers as you can fit two different 5 x 7 inch images on one sheet. After printing two pages with two photos on each type of paper, I can see and compare first-hand the unique and sometimes subtle differences between them. By doing this, I have come to appreciate and respect the special qualities of each paper, so I can choose the right one to use depending on how I want my final print to look.



ADVENTURE
CANADA

Call for a free brochure
1.800.363.7566
adventurecanada.com

Northwest Passage

Culture . Wildlife . Wilderness



Aboard the Ocean Endeavour
August - September, 2018 & 2019
Berth cost from \$9,295 – \$24,095 USD per person



Try precision, professional-quality photography
equipment courtesy of the onboard Nikon Camera
Trial Program.



Adventure Canada
14 Front Street South
Mississauga, ON
L5H 2C4, Canada
TICO Reg# 4001400

Spring is Here!



Editor Norm shot this photo of a flower bud with a Pentax K20D and 100mm macro lens, at 1/125 second, f/16, ISO 400. "I used two flashes to light this shot, one from the left, and one from the right. The main flash was connected to the camera with an off-camera flash sync cord, the second flash was set to flash slave mode. Both flashes were set to auto exposure at f/16." Check out Norm's two-flash macro rig at the flickr group. www.flickr.com/groups/photoneewsgallery/discuss/72157622363501704/

The PHOTONews Canada Spring 2018 Challenge theme is "Spring is Here!"

Your assignment: to photograph an image that conveys a sense of "Spring" - scenes may include the new foliage appearing after the long cold winter, people enjoying the first warm weather of the year, pets or wildlife in the great outdoors, or any image that brings to mind the notion that Spring has arrived.

You may want to interpret the theme from a creative approach, using ambient lighting in the early morning or late afternoon to show the "blue hours", or you could tackle night photos during the holiday season... but the concept for this assignment is to capture an image that brings to mind the reaction "Spring is Here!"

You may submit images photographed prior to the Spring of 2018.

If you need help in posting your entries, please refer to this thread - How to upload and post your pictures - www.flickr.com/groups/photoneewsgallery/discuss/7215766470...

The contest is open to all Canadian photographers. Please enter by joining this flickr® group (www.flickr.com/

[groups/photoneewsgallery/](http://www.flickr.com/groups/photoneewsgallery/)) and post your entries in the PHOTONews Spring 2018 "Spring is Here!" Challenge, where you will find additional details, samples, suggestions, and technique tips. It's fun, it's free, and it's a friendly environment for photographers of all ages and skill levels.

The contest deadline for entries for the "Spring is Here!" Challenge is April 15, 2018.

You may post up to 5 images per week in the "Spring is Here!" Challenge.

See your pictures in print!

It is always a thrill to see your pictures in a national magazine – for every issue, PHOTONews Canada selects reader's images from the photos posted in our PHOTONews Canada Reader's Gallery flickr® group pool – so take a look, sign in, post a few of your favourite photos, and enjoy our interactive photographic adventures!

The PHOTONews Canada Challenge is sponsored by Panasonic Canada, who will present a special prize for the most interesting image selected for publication in the next issue.

FOLLOW US ON THE NET



facebook.com/
PHOTONewscanada



twitter.com/
PHOTONewscanada



Tune in to our YouTube Channel:
PHOTONews Canada TV



Focal Length: 400mm Exposure: F/11 1/160sec ISO: 100

Shoot precisely in the moment

Extremely portable, with a highly responsive AF.

Now you can seize the moment with lasting effect.

Step up to the latest in ultra-telephoto zoom lenses

NEW

Lightest in its class*

100-400mm F/4.5-6.3

Di VC USD (Model A035)

For Canon and Nikon mounts
Di: For full-frame and APS-C format DSLR cameras

* Among 100-400mm interchangeable lenses for DSLR cameras
(as of Oct, 2017; Tamron)



TAMRON

www.tamron.ca

Tripod mount is an option.

I AM CONDENSED POWER



D500 | f/6.3 | 80 mm | 1/3s | ISO 1000



I AM THE NEW NIKON D500. I have professional features in a compact body. Starting with an incredible 153 point AF system and 4K UHD movies. Featuring up to exceptional 51,200 ISO sensitivity with an extraordinary 180,000 pixels AE metering sensor. Operated via tilt screen with touch operation functionality with Wi-Fi and SnapBridge included. I am condensed power. Learn more at Nikon.ca

*This camera's built-in Bluetooth® capability can only be used with compatible smart devices. The Nikon SnapBridge application must be installed on the device before it can be used with this camera. For compatibility and to download the SnapBridge application, please visit Google Play® and App Store. The BLUETOOTH® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and Google Play® is a trademark of Google Inc.

