

The Nikonian



eZine

55

www.nikonians.org

Contents

03 Editorial

04 A Celebration of Photography

by J. Dave Summers (dm1dave)

06 Membership

07 ANPAT 13 Images

53 White Balance - Why Is It Important?

by Hal Byron Becker (HBB)

62 Photo Pro Shop News

64 The Five Elements of Great Portraiture

by Greg Stangl (profotoguy)

67 Calendar

69 New From Nikon

74 Back cover



ON OUR COVER:

Van 3 portrait taken in the silver chloride mining ghost town of Chloride, AZ. Shot with the D800, 24-70mm f/2.8 @ f/11, 1/250s, ISO 400. People grouped themselves and I took this with a single shot. I did look (chimp) to see if everyone's eyes were open in the image. Everyone looked fine so I collapsed the tripod and we were on our way. There was a lot of jovial talk about no "redos" required and "one and done." It turned out to be a pleasing group arrangement with an air of spontaneity in the pose and the light was very soft. L-R, Mike Hagen (Mike_Hagen), Pat Kovach (patk), Bob Kovach (bobjoek), Dan Johnsen (dwj), Donald Petterson (stentdoc), Ronnie Wright (rwwright), MaryKaye Frazier (MKFRAZIER), and me, Jim Knighten (emi_fiend).

THIS PAGE:

"Wreck of Peter Iredale" was made by Darryl Hodson (skibreeze7), winner of the HDR Landscape theme contest in the Landscape forum. He made this remarkable and natural looking HDR rendition of an abandoned and scavenged ship, from five images shot at 1-stop intervals with his Nikon D800, 16-35mm VR Nikkor @ 16mm, f/16, ISO 100

THE NIKONIAN™ is copyrighted © Nikonians EMEA Ltd 2013. All rights reserved. Nikonians® is a registered trademark. Our domains, products and services are not associated or affiliated with the Nikon Corporation. All images are copyright of the respective photographers. Chief Editor Tom Boné (flashdeadline@nikonians.org). Design and Production provided by Kristina Nessler, Executive Office Manager, enprovia® Software Engineering s.r.o. Our circulation: Over 200,000 copies of this publication are downloaded within the first three months of being issued.

Editorial - ANPAT 13

by J. Ramón Palacios (jrp)



JRP
Administrator
Charter Member
Co-Founder
32,015 posts

Our 13th Annual Nikonians Photo Adventure Trip was threatened by the close down of all National Parks. Notwithstanding what looked like a major catastrophe, a new schedule had been prepared in anticipation by our Trip Leader Mike Hagen, full with out-of-the-way locations. One or two may have turned out "so bad that they were good", full of unexpected subjects. However, what was more important was the fact that attendees chose to make lemonade when we were handed lemons by the parks shutdown. Our motto "Share, Learn, Inspire", was lived maybe even more than ever. Those who had their first ANPAT were highly appreciative and full of praise.

The images produced and the mood were both superb. The pictures' quality attesting the further prowess of our veterans and the

quick learning of the first-timers. We just can't be proud enough of the ANPAT concept, but rejoice ourselves even more on the joyful spirit of attendees. Nikonians has survived the test of time because it is mostly composed of extraordinary people. The ANPAT 13 group proved that, once more. To all of you, thank you.

As I was leaving home, waiting for my airplane at the Phoenix International Airport noticed a man standing behind me while I was 'chimping'. I turned and he apologized but asked where did such wonderful pictures were taken. So I told him: "All over Northern Arizona". He continued: "And where are you coming from?", so I told him and he couldn't believe it: "So far?". I was tempted to say "I didn't come walking" but repressed it. "Why come this far", "Why photograph if you are not a professional?". He gave me the opportunity to think again about it: "We photograph because we must" "Ah, passion; but" -he continued- "why take pictures of iconic places that have been photographed so many times" ... "and you can just buy the post cards". Without pausing and hoping I was echoing all Nikonians I proudly replied: "Well, because those images will be ours!" He smiled back.



A Celebration of Photography

by David Summers (dm1dave)

The Nikonians community has grown accustomed to have periodic challenges/contests within the Master Your Vision forums, and assignments in its very specific forum, mostly monthly. There, splendid images are produced with a pre-selected theme and a winner is chosen by the vote of members.



dm1dave
Administrator
10,050 posts

The winner of the challenge/contest gets to select the next theme and suggests the finalists of the following contest for members to cast their votes. The quality of the images is always on the increase, and as we expand the practice to more forums, members rise to the challenge and take the opportunity to post remarkable photographs as they hone their skills and keep on improving to higher levels.

Currently, the forums with such contests currently are: **Online Photo Assignments; Wildlife; Landscape; Micro, Macro and Close-up; Sports, and Travel.** We have recently also added a quarterly contest in the Underwater and Aquatic Life forum.

To further celebrate the participation of members, the Nikonians Annual Photo Contest rewards the top photographs and their creators. Our Corporate Partners [ThinkTANK photo](#) and [MK Controls](#) are happy to sponsor the contest with the presentation of prizes. This year we will select five prize winning photographs.

Participating in these contests can help us to become better photographers. We can see and learn from all of the entries as our members showcase their best work each month. These monthly contests are the preliminary rounds for the Annual Nikonians Photo Contest where you have the opportunity to win attractive prizes and have your images highlighted in the Winners Galleries and published in the eZine.



Landscape – Skies – by Russ Glindmeier (russg)



Underwater – Bonair – by Charles Krueger (ckrueger)

A Celebration of Photography

by David Summers (dm1dave)



Macro - Tools - by Jordi Viñas Bascompte (jordivb)

These unique contests and challenges are member driven. Unlike most other photo contests our members choose the themes, you see all entries as they are posted and the previous months winners choose the finalists; then the entire community has the opportunity to vote for the winners.

We are inviting you to increase your participation in both image submission and voting to help us make your contests the best photo contests on the internet.

We will announce, at the Café and the Contests forums, all up-to-date contest information with links to each open contest and to the polls open for voting.



Online Assignments – Creative Cropping - by Dan Wiedbrauk (dome2760)

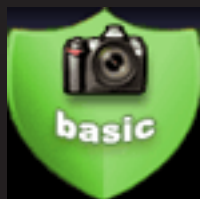


Wildlife – Low Key – Rick Moran (slopoki1)

Membership levels

Nikonians offers several levels of membership. Of course there is a free, basic membership good for a trial period, that you can now extend indefinitely depending on interactivity, but we invite you to enjoy the fun and benefits of Silver, Gold and Platinum membership levels providing you with sell & buy opportunities, image upload, free shipping and more. Nikonians is a not-for-profit community. All capital generated through our operations (The Nikonians Community, The PhotoProShop and The Nikonians Academy) are reinvested to sustain our growth. Each membership counts and we take this opportunity to thank you for your support!

Bo Stahlbrandt and J. Ramón Palacios, Founders of Nikonians



Access our free forum areas.
Learn, share and participate in lively discussions
Receive our newsletters, podcasts and RSS feeds
Receive our eZine THE NIKONIAN™ as PDF
Access our fast search portal NikoScope™



Everything in the Silver level plus
Your exclusive Nikonians personal Photographer's ID
Get your personal Nikonians Business Card
Write access to the Nikonians Wiki
Your own personal blog at Nikonians
Your own personal email address at Nikonians



Image gallery
Your personal image gallery with many features.
Participate in photo contests
Participate in the Annual Best of Nikonians Images Photo Contest. Prizes are awarded during the year as well as in the contest finals.
Access to classifieds section
Buy and sell your gear in our Buy and Sell Forums
Access to Nikonians workshops & tours
Access to Nikonians events
Upload and link to images in forums
Rebates and more!



Everything in the Silver and Gold level plus free shipping in the Photo Pro Shop, larger gallery, free access to events
Access to Platinum Lounge
Free access to the Nikonians Business Directory, the Orange Pages



A membership starts as low as \$25 USD per year or less than 7 cents a day. Join today at www.nikonians.org/membership



Bob Kovach (bobjoek)

Route 66, Seligman, AZ – Route 66 kitsch.

5 shot HDR processes for a grunge look, Nikon D300s,
18-200mm lens, 800 ISO, 1/125 sec @ f/8 (base exposure)



Bob Kovach (bobjoek)

Chloride, AZ ghost town – photo of abandoned train station.
5 shot HDR, Nikon D300s, 18-200mm lens, 400 ISO, 1/320 sec @ f/10
(base exposure)

Bob Kovach (bobjoek)

Sedona, AZ sunrise – photo of the shadows of three ANPAT participants.
Nikon D300s, 18-105mm lens, 200 ISO, 1/200 sec @ f/8



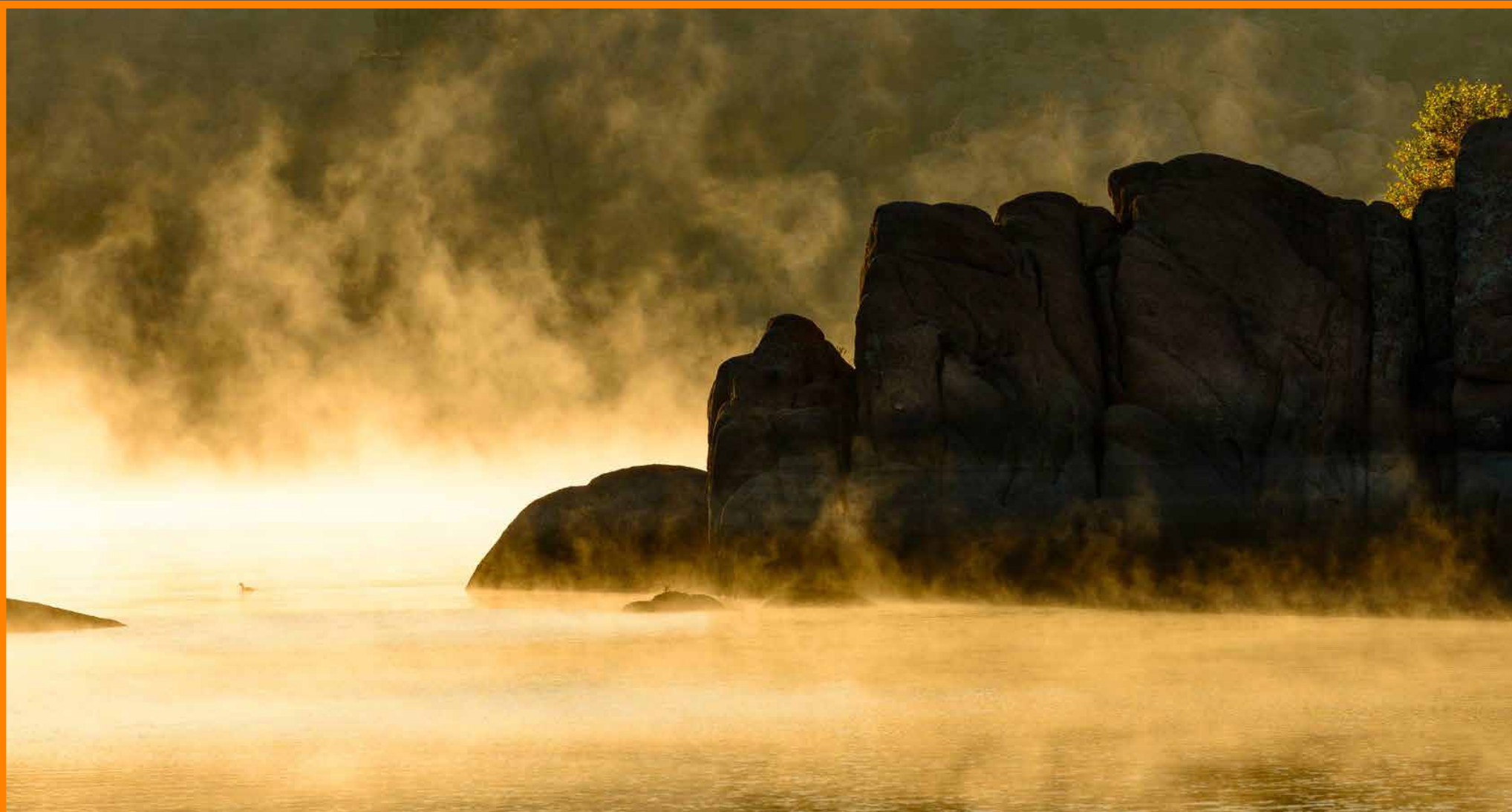
Bob Kovach (bobjoek)

Little Painted Desert County Park near Winslow,
AZ – shot of the multi-colored dunes;
Nikon D300s, 18-200mm lens, 200 ISO, 1/800 sec @ f/8



Bob Kovach (bobjoek)

Watson Lake near Prescott, AZ – Sunrise lake photo.
Nikon D300s, 18-200mm lens, 200 ISO, 1/30 sec @ f/16



Brad McDowell (Laserdoc)
"Watson Lake"

Nikon D800, 200mm @ f/11, 1/200sec, ISO 100

ANPAT 13



Brad McDowell (Laserdoc)

"ANPAT 13"

Nikon D800, 200mm @ f/11, 1/10sec, ISO 100



Brad McDowell (Laserdoc)

"Old cowboy boots"

Brad McDowell (Laserdoc)

"At the junkyard"

Nikon D800, 120mm @ f/11, 1/3sec, ISO 100



Brad McDowell (Laserdoc)

"At the shop"



Don Patterson (stentdoc)

"Stand'in on the corner in Winslow, AZ"

Nikon D3S, 14-24mm f/2.8 @ 14mm, f/11,

ISO 100 - Handheld HDR - 9 bracketed shots - Processed with HDR EFEX Pro 2



Don Patterson (stentdoc)

"Sittin' on Route 66"

Handheld HDR – Nikon D3S, 14-24mm f/2.8 @ 14mm, f/11,
ISO 500 - 7 bracketed shots - processed in HDR EFEX Pro 2



Don Patterson (stentdoc)

"Waiting for a speeder on Route 66"

Nikon D3S, 14-24mm f/2.8 @ 24mm, f/7.1,
ISO 500 - Handheld HDR - 7 bracketed shots - Processed with HDR EFEX



Don Patterson (stentdoc)

"The bird that almost got away..."

While changing lenses at the time this bird decided to swim toward me. I shot a burst of images - this is the one in focus...

Nikon D3S, 200mm @ f/3.5,
1/2500 sec, ISO 400

Don Patterson (stentdoc)

"The Dentist's office"

Hand held HDR, 7 exposures processed in
HDR EFEX Pro 2 – Nikon D3S, ISO 1600,
14-24mm f/2.8 @ 24mm, f/5.0 Pro 2



Gary Poole (gpoole)

Horseshoe Bend Pano

This is an 8 shot panorama taken with using a 17-35mm in the landscape orientation. I know this is an unusual way to take a pano image. The 17-35 was the widest lens in my kit and I had expected that 17mm would be wide enough to get the full image in a single shot, but it wasn't. I probably should have switched to a longer lens and taken portrait orientation shots to assemble the pano, but we didn't have much time and I was tired and getting lazy. I created TIFFs from the NEF images and stitched them with Photoshop Elements 11.

Horseshoe Bend is along the Colorado River near Page on the Navajo Indian Reservation. It is upstream from the Grand Canyon.

D4 with AF-S Nikkor 17-35mm 1:2.8D @ 19mm, ISO 100, f/9, 1/100 sec.

Gary Poole (gpoole)

Sedona at Dawn

Taken from the Airport Mesa overlook.

Nikon D4 with AF-S Nikkor 24-85mm 1:3.5-4.5 @ 35mm, ISO 400, f/4, 30 sec.



Gary Poole (gpoole)

Sunset on Lee Mtn. and Courthouse Butte

This was taken from the Yavapai Vista Trail along Hwy. 179 south of Sedona. We had almost given up for the evening because the light was so uninteresting. Just as we were ready to pack up we got this beautiful light and sky. Lee Mtn. is on the left, Courthouse Butte on the right, and the small formation sticking up in the middle is Rabbit Ears.

The high ISO and fast shutter speed was because I was taking a bracketed sequence for HDR processing. The light was changing so quickly I felt I couldn't use longer exposures. The dynamic range of the D4 allowed me to use a single shot instead. If I'd realized that a single shot would work, I would have used a lower ISO and longer shutter time.

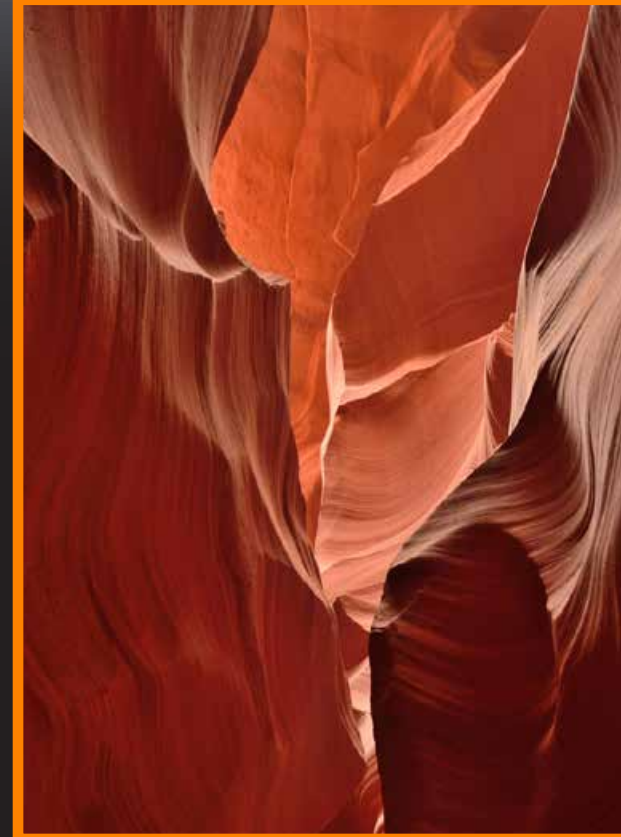
D4 with AF-S Nikkor 24-85mm 1:3.5-4.5 @ 32mm, ISO 800, f/5.6, 1/125 sec.



Gary Poole (gpoole)
The Little Painted Desert

The Little Painted Desert is a county park about 20 miles north of Winslow. There many views from the rim overlooking this area. This shot was taken from a very eroded path down into the formations. I think it is a much more interesting view than the many shots I took from the rim.

D4 with AF-S Nikkor 24-85mm 1:3.5-4.5 @ 85mm, ISO 100, f/8, 1/320 sec.



Gary Poole (gpoole)
Lower Antelope Canyon

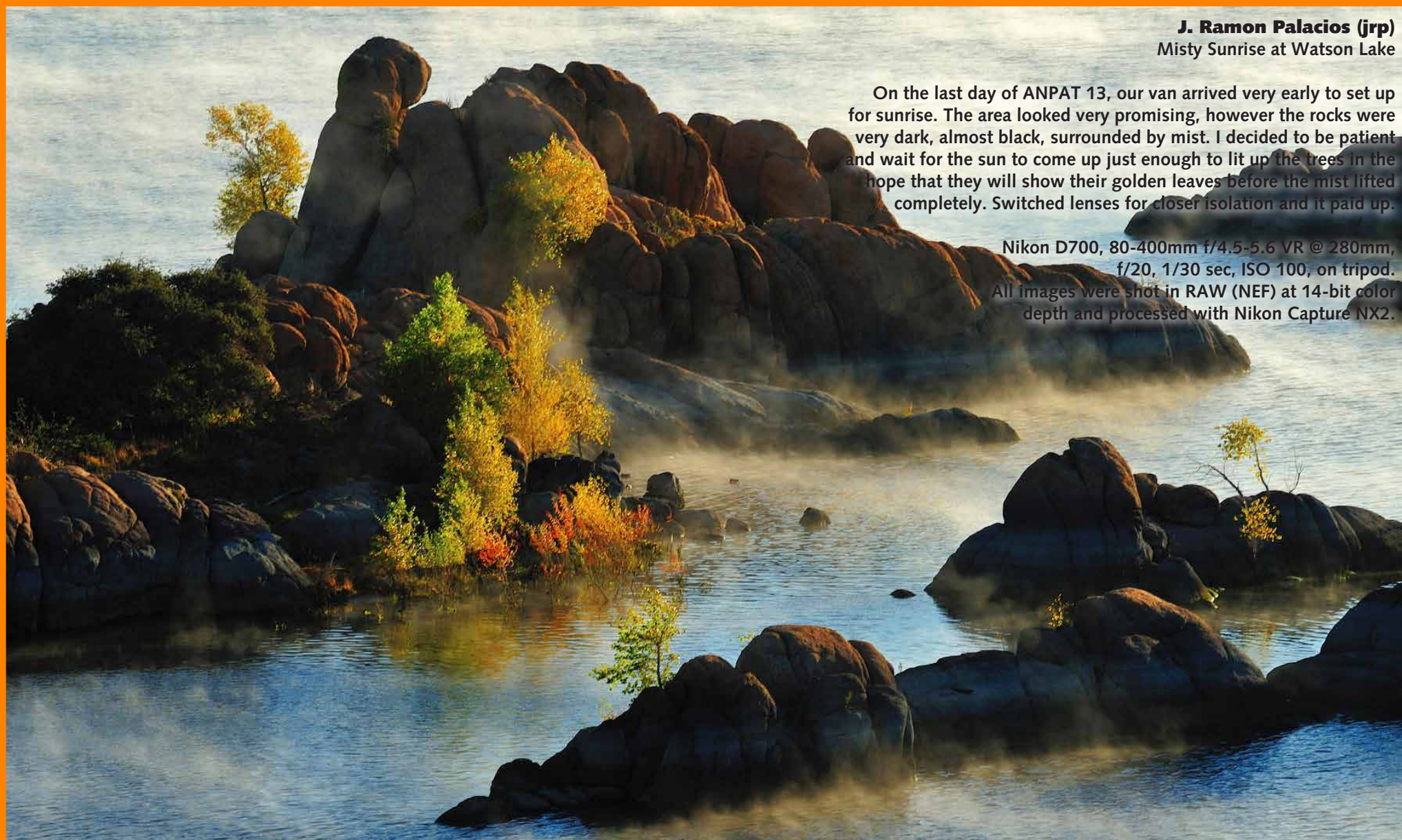
Even though the sky above was overcast there was still interesting light down in the canyon. All the shots I took in Antelope Canyon were bracketed with the intent of doing HDR. Because of the amazing dynamic range of the D4 I was able to make this image from a single shot just by adding some shadow protection in the Capture NX2 Quick Fix section. Antelope Canyon is near Page on the Navajo Indian Reservation.

D4 with AF-S Nikkor 24-85mm 1:3.5-4.5 @ 24mm, ISO 200, f/9, 1/8 sec.

J. Ramon Palacios (jrp)
Misty Sunrise at Watson Lake

On the last day of ANPAT 13, our van arrived very early to set up for sunrise. The area looked very promising, however the rocks were very dark, almost black, surrounded by mist. I decided to be patient and wait for the sun to come up just enough to lit up the trees in the hope that they will show their golden leaves before the mist lifted completely. Switched lenses for closer isolation and it paid up.

Nikon D700, 80-400mm f/4.5-5.6 VR @ 280mm,
f/20, 1/30 sec, ISO 100, on tripod.
All images were shot in RAW (NEF) at 14-bit color
depth and processed with Nikon Capture NX2.





J. Ramon Palacios (jrp)
Horseshoe Bend

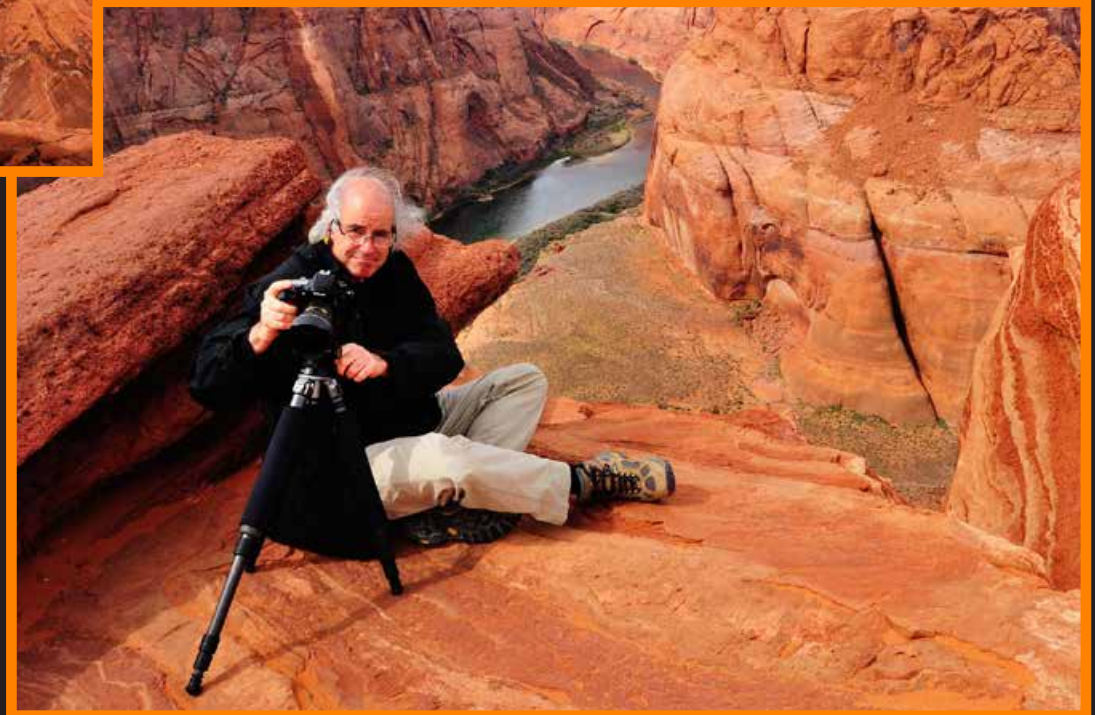
Fighting vertigo I laid on a flat rock by the edge, extending my Magica tripod out with D700 and 14-24mm f/2.8 @ f/18, ISO 320.

My first sequence of seven intended images for HDR was of the wall. Jim Gould (jgould2) noticed my camera was not pointed correctly and came to my rescue, kneeling down at the edge of the cliff to reset the ball head and camera. That did it for perfect framing. However, as I arrived home I noticed I had forgotten to set the EV step to other than ZERO, so all the sequence was made at the same exposure! This image is the result of blending one bright and one dark modified versions of a single shot, using the [Photoshop Layer Mask technique](#) Larry Anderson (mnbuilder49) taught us during a short break.

J. Ramon Palacios (jrp)

Richard Hulbert (rhulbert) took my place and sat by the edge as if there was not a 1,000 ft drop (300 meters!) . In admiration I made this portrait of him as he was prepping for his own images.

Nikon D700, 14-24mm f/2.8 24mm, f/18, 1/125 sec, ISO 320, on tripod.



J. Ramon Palacios (jrp)
The Snout of the Beast

At a bend inside the Lower Antelope Slot Canyon, this rock formation looked to me at first as a giant tooth of a prehistoric carnivore, trapped in molten rock, revealed after thousands of years of floods. Looking closely it resembled more the snout of an Alien monster.

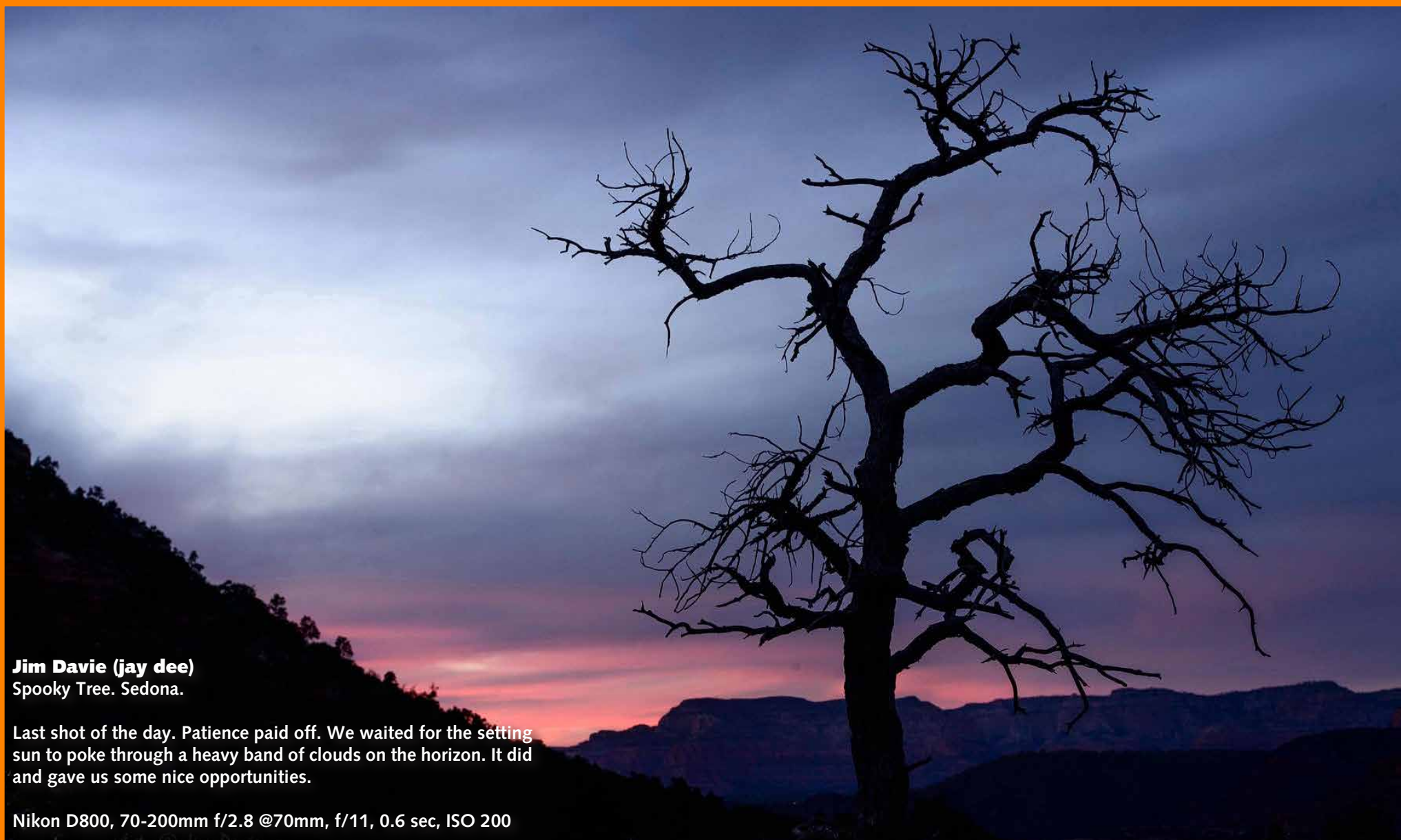
Nikon D700, 12-24mm f/2.8 @ f/11, 1/5 sec, ISO 320, on tripod.



J. Ramon Palacios (jrp)
Nikonian at Little Painted Desert

Jim Gould (jgould2) working at this incredible site. One can learn so much just by watching Nikonians at work.

Nikon D700, 28-70mm f/2.8 @ f/20, 1/50 sec, ISO 100, on tripod.



Jim Davie (jay dee)
Spooky Tree. Sedona.

Last shot of the day. Patience paid off. We waited for the setting sun to poke through a heavy band of clouds on the horizon. It did and gave us some nice opportunities.

Nikon D800, 70-200mm f/2.8 @70mm, f/11, 0.6 sec, ISO 200

Jim Davie (jay dee)

Little Painted Desert

Although the Little Painted Desert was stunning to view, I had trouble finding photo inspiration. Once I found the beautiful abstracts with my 300mm I didn't want to leave. This place I most want to return.

Nikon D800, 300mm f/4 @ f/10, 1/1600 sec, ISO 320

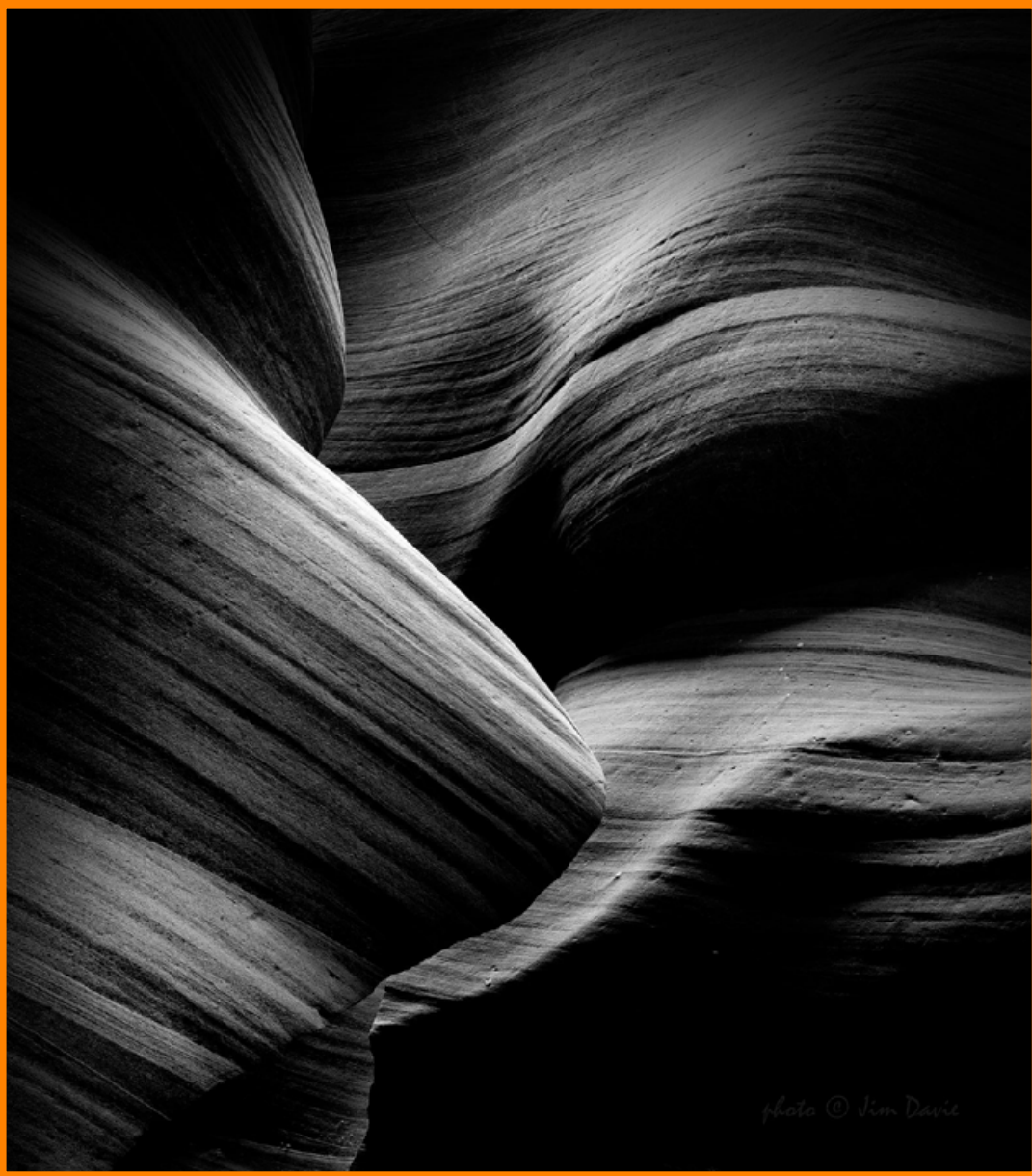


Jim Davie (jay dee)

Rabbit Ears and Lee Mountain, Sedona AZ

Patience paid off waiting for some colour in the sunset sky.

Nikon D800, 70-200mm f/2.8 @ f/11, 1/8 sec, ISO 200



Jim Davie (jay dee)

Lower Antelope Canyon

Great place for abstracts. Very glad our Van made the trek to this special place. B&W conversion in On One software.

Nikon D800, 24-70mm f/2.8 @ 42mm, f/13, 1/5 sec, ISO 250



Jim Davie (jay dee)

Grasshopper Point, Oak Canyon, Sedona

Dennis Owens led a band of eager shooters to this fine spot shortly after our welcoming dinner. This tree seemed to be a nice foreground element to a star shot.

Nikon D800, 14-24mm f/2.8 @ 15mm f/3.2, 30 seconds, ISO 2000



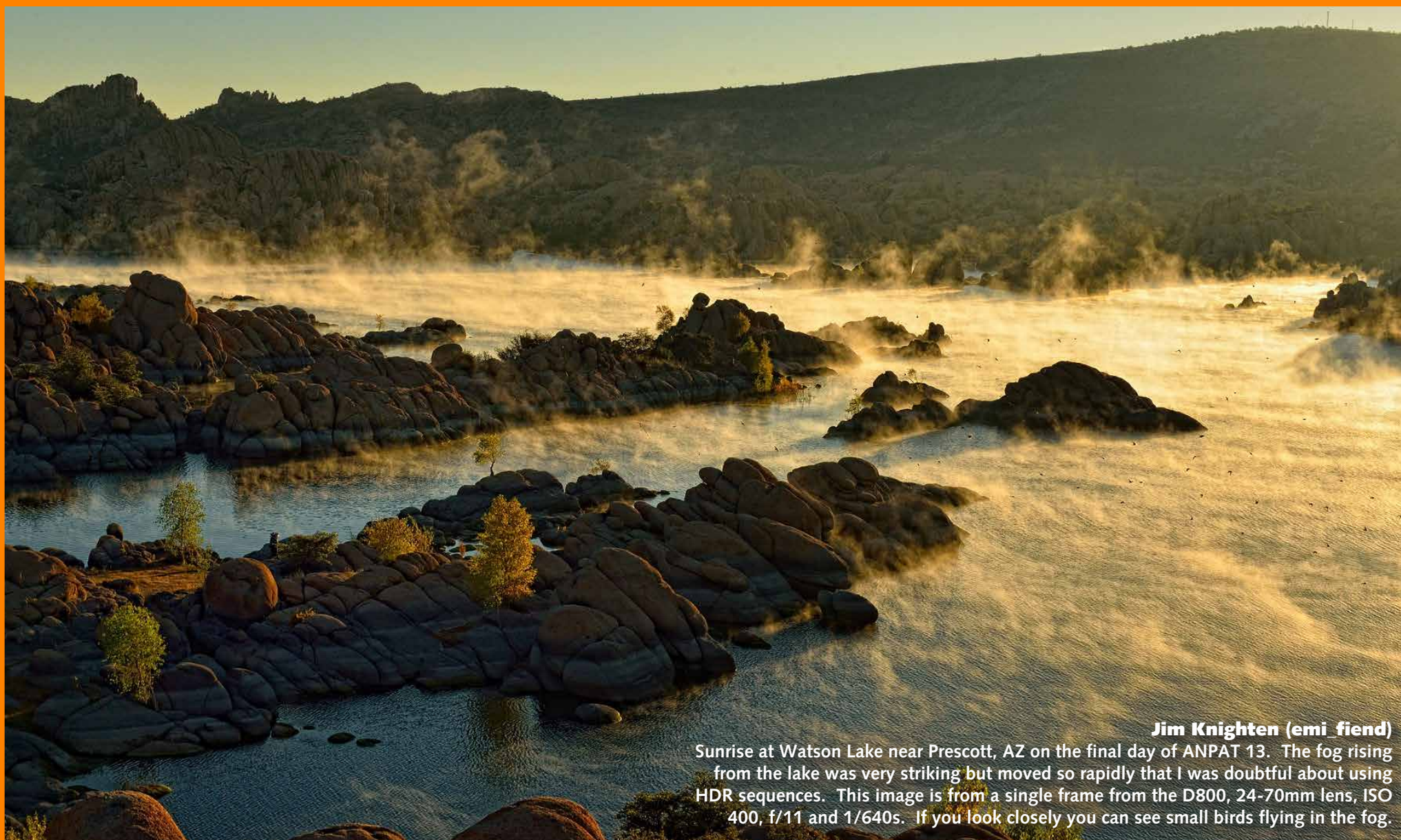
Jim Thackrey (jthackrey)



"Patience"

"Sedona Sunset"





Jim Knighten (emi fiend)

Sunrise at Watson Lake near Prescott, AZ on the final day of ANPAT 13. The fog rising from the lake was very striking but moved so rapidly that I was doubtful about using HDR sequences. This image is from a single frame from the D800, 24-70mm lens, ISO 400, f/11 and 1/640s. If you look closely you can see small birds flying in the fog.

Jim Knighten (emi_fiend)

Oatman, AZ is an Arizona gold mining ghost town known for wild burros (descendants of miner's burros) that come in to town and entertain tourists. On the drive through the mountains to Oatman, we encountered an advance scouting party of wild burros.

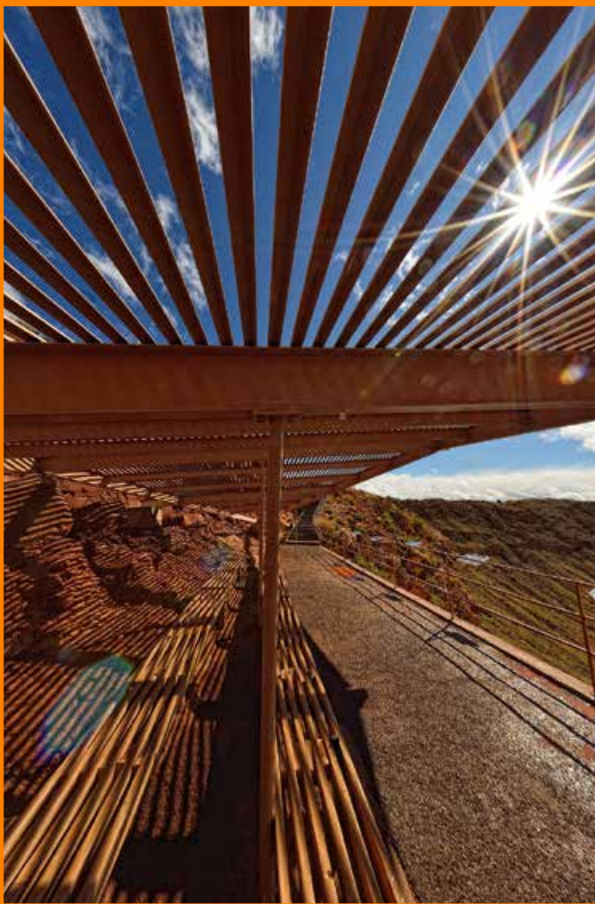
I was able to get this shot with the D800, 24-70mm, ISO 800, f/11 and 1/800s. A telephoto lens would have been better because I had to make a substantial crop to get this image. The resolution of the D800 is so great that the cropped image looks good. I improved the contrast with Nik's Tonal Contrast filter.



Jim Knighten (emi_fiend)

Little Painted Desert County Park near Winslow, AZ provided a landscape opportunity similar to what we would have seen if the National Parks had been open. This day began with snow in Williams, turning to rain at Meteor Crater and then sun with lovely clouds. It made for a gorgeous afternoon.

This image is from a 5-shot HDR sequence taken with a D800, 14-24mm lens, ISO 200, f/11 and processed with Nik HDR Effects Pro 2.Pro 2



Jim Knighten (emi_fiend)

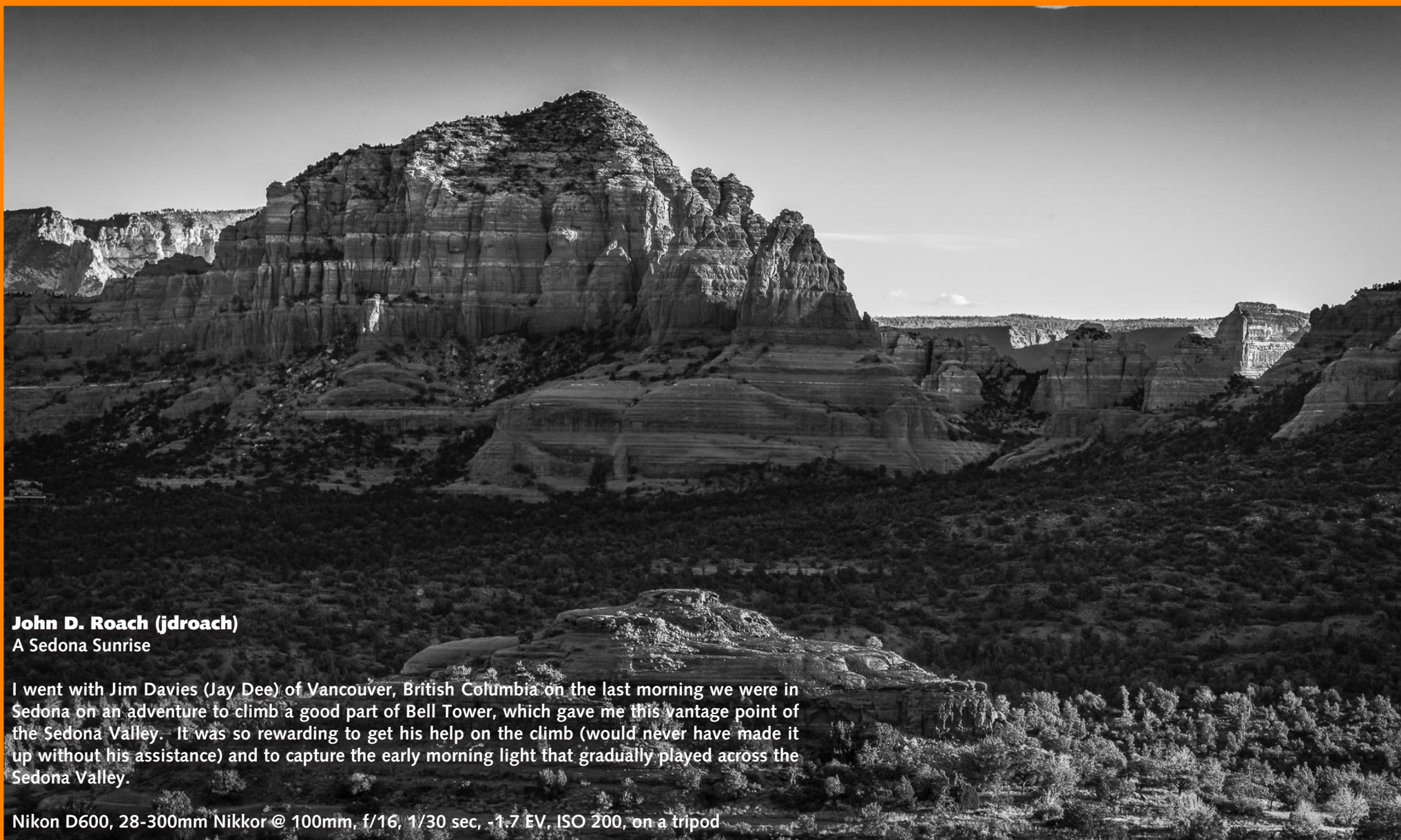
Shot at a viewing pavilion at Meteor Crater with the D800, 10.5mm DX Fisheye lens, ISO 200, f/18, 1/320s.

All week when asked what he was shooting, Mike Hagen would say he was shooting sun stars. I felt that I had to get on the sun star bandwagon. The patterns of the shelter and shadows spoke to me. I shot with an FX camera with a DX fish-eye lens (a little tricky) because my D300 was in the van. I de-fished the image with Capture NX2.



Jim Knighten (emi_fiend)

Sunset at Crescent Moon Park near Sedona made for gorgeous landscape opportunities. Some in our van were shooting the iconic view of Cathedral Rocks with Oak Creek flowing over rocks in the foreground. Because of the overcast sky, I had given up on sunset and made my way back to the van. Suddenly Cathedral Rocks glowed red and I shot this beautiful, but not so iconic view just a few feet from the van. D800, 24-70mm lens, ISO 5000, f/8, 1/40s. The image looks over-saturated, but this is how it actually looked.



John D. Roach (jdroach)

A Sedona Sunrise

I went with Jim Davies (Jay Dee) of Vancouver, British Columbia on the last morning we were in Sedona on an adventure to climb a good part of Bell Tower, which gave me this vantage point of the Sedona Valley. It was so rewarding to get his help on the climb (would never have made it up without his assistance) and to capture the early morning light that gradually played across the Sedona Valley.

Nikon D600, 28-300mm Nikkor @ 100mm, f/16, 1/30 sec, -1.7 EV, ISO 200, on a tripod



John D. Roach (jdroach)

Little Painted Desert

This image is based on a 7 image stitch in PTgui of the Little Painted Desert. It was a beautiful last morning of photography in northern Arizona.

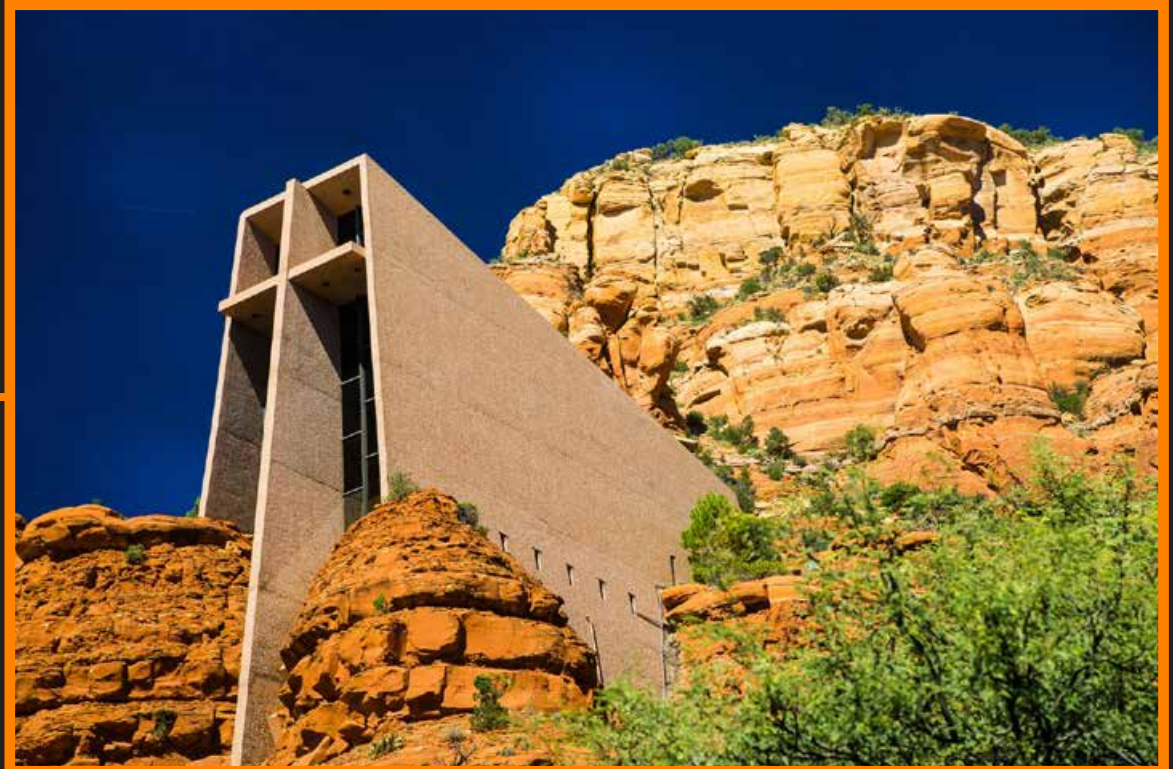
Nikon D800, 28-300mm @ 30mm, f/18. A 7 image panorama with

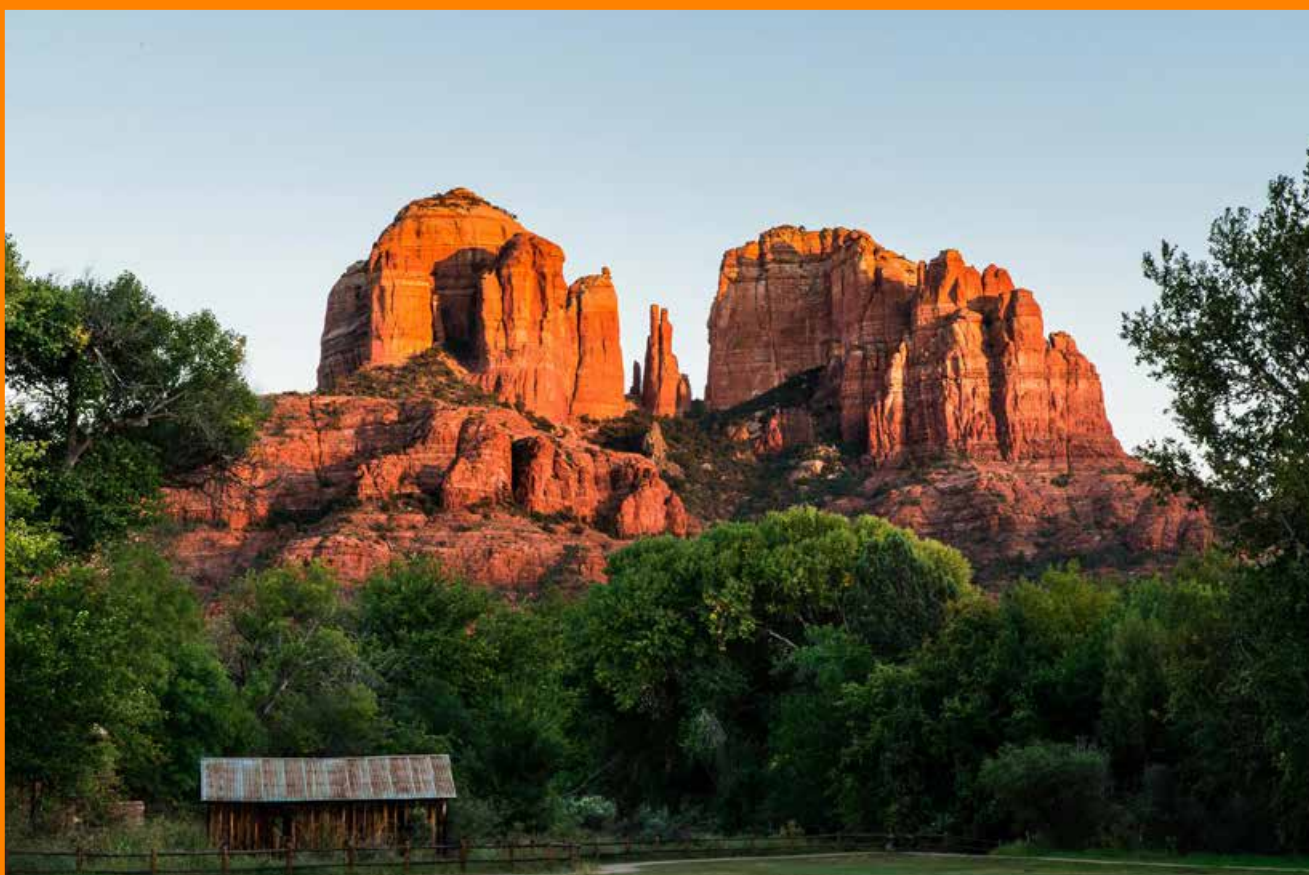
John D. Roach (jdroach)

The Chapel of the Holy Cross

We were climbing up the circular road leading to The Chapel of the Holy Cross that looks out over Sedona, Arizona. I grabbed this shot from VAN 1 as we passed below this incredible joining of the hand of man and the natural red limestone of Sedona.

Nikon D800, 28-75mm f2.8 Tamron @ 75mm,
f/6.3, 1/200 sec, 0.0 EV, ISO 1000





John D. Roach (jdroach)

Cathedral Rock at Sunset

Image made just west of Cathedral Rock in Sedona AZ at Sunset

Nikon D800, 28-75mm f2.8 Tamron @ 75mm, f/18.0, 1/6 sec, -0.7 EV, ISO 200, on a tripod

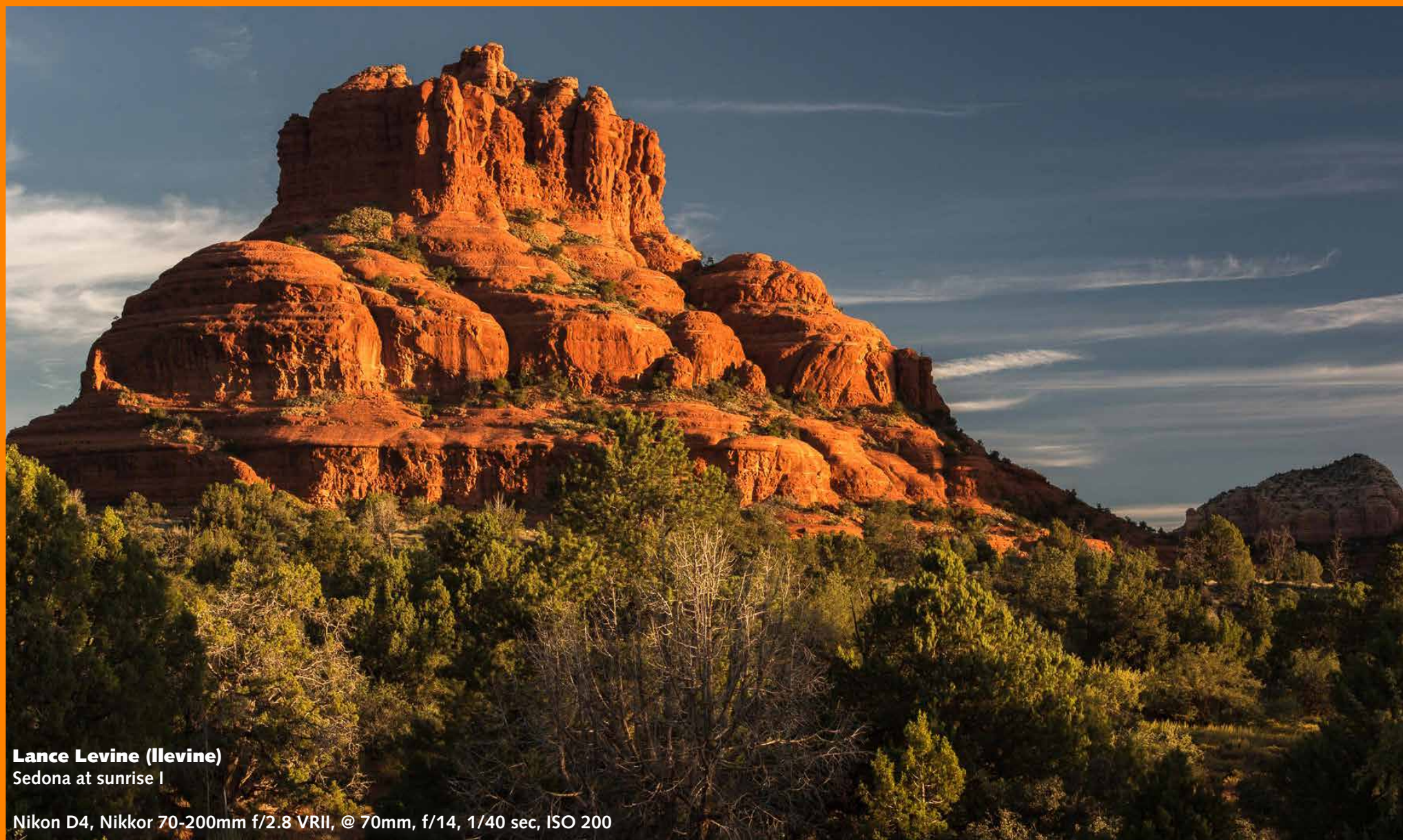


John D. Roach (jdroach)

In Search of Light

The gradual descent through Lower Antelope Canyon was one of the premier experiences of the ANPAT 13 trip only perhaps exceeded briefly by Horseshoe Bend. The two hours of play with natural abstractions in this fantastic slot canyon will never be forgotten.

Nikon D800, 16-35mm f/4 Nikkor @ 35mm, f/9, 1/200 sec, -1.7 EV, ISO 4000. Handheld.



Lance Levine (llevine)
Sedona at sunrise I

Nikon D4, Nikkor 70-200mm f/2.8 VR II, @ 70mm, f/14, 1/40 sec, ISO 200



Lance Levine (llevine)
Antelope Canyon I

Nikon D4, 24-120mm f/4 VR II @ 66mm, f/7.1,
1/3 sec, ISO 400, Exposure compensation -2



Lance Levine (llevine)
Antelope Canyon II

Nikon D4, 24-120mm f/4 VR II @ 34mm, f/7.1, 1/3 sec,
ISO 400, Exposure compensation -2



Lance Levine (llevine)
Sedona at Sunrise II
Nikon D4, Nikkor 24-120mm VR II,
@ 50mm, f/14, 1/8 sec, ISO 100

Lance Levine (llevine)

Little Painted Desert
Nikon D4, Nikkor 70-200mm VR II @ 135mm, f/16,
1/25sec, ISO 100, -2 exposure compensation





Larry Anderson (mnbuilder49)

Nikon D3, 14-24mm f/2.8G @ f/2.8, 30 seconds, ISO 3200

Larry Anderson (mnbuilder49)

Nikon D3X, 24-70mm f/2.8G @ f/8,
ISO 100; 3 exposure HDR



Larry Anderson (mnbuilder49)

Nikon D3X, 24-70mm f/2.8G @ f/11,
ISO 100; 7 exposure HDR



Larry Anderson (mnbuilder49)
Nikon D3X, 24-70mm f/2.8G @ f/11,
ISO 100; 5 exposure HDR

Larry Anderson (mnbuilder49)
Nikon D3X, 24-70mm f/2.8G @ f/11,
ISO 100; 5 exposure HDR





Pat Kovach (patk)
Little Painted Desert County Park near Winslow, AZ – shot of
the multi-colored dunes with fellow ANPAT-13 participant Jim Knighten (emi_fiend).
Three shot HDR, Nikon D7000, 18-105mm lens, 400 ISO, 1/480 sec @ f/11 (base exposure)



Pat Kovach (patk)

Sedona, AZ – Photo of sunset afterglow at Red Rock Crossing.

Nikon D7000, 18-200mm lens,
560 ISO, 1/500 sec @ f/4.8



Pat Kovach (patk)

Chloride, AZ – Photo of rock formation in the mountains above Chloride, Arizona.

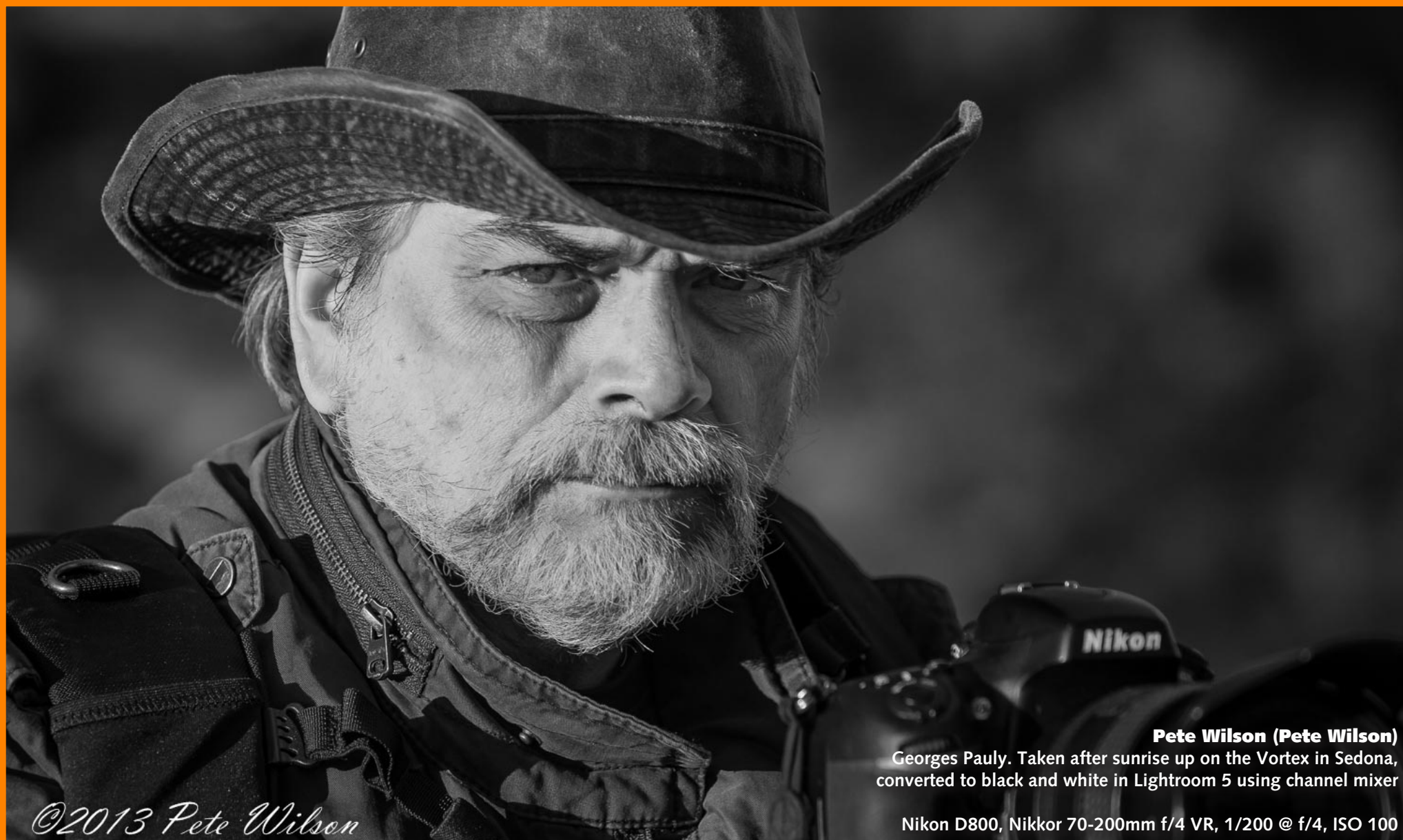
Nikon D7000, 85mm lens,
1100 ISO, 1/350 sec @ f/13



Pat Kovach (patk)

Jerome, AZ – Detail of old wood in the ghost town at Jerome, Arizona.

Nikon D7000, 18-200mm lens,
280 ISO, 1/180 sec @ f/8



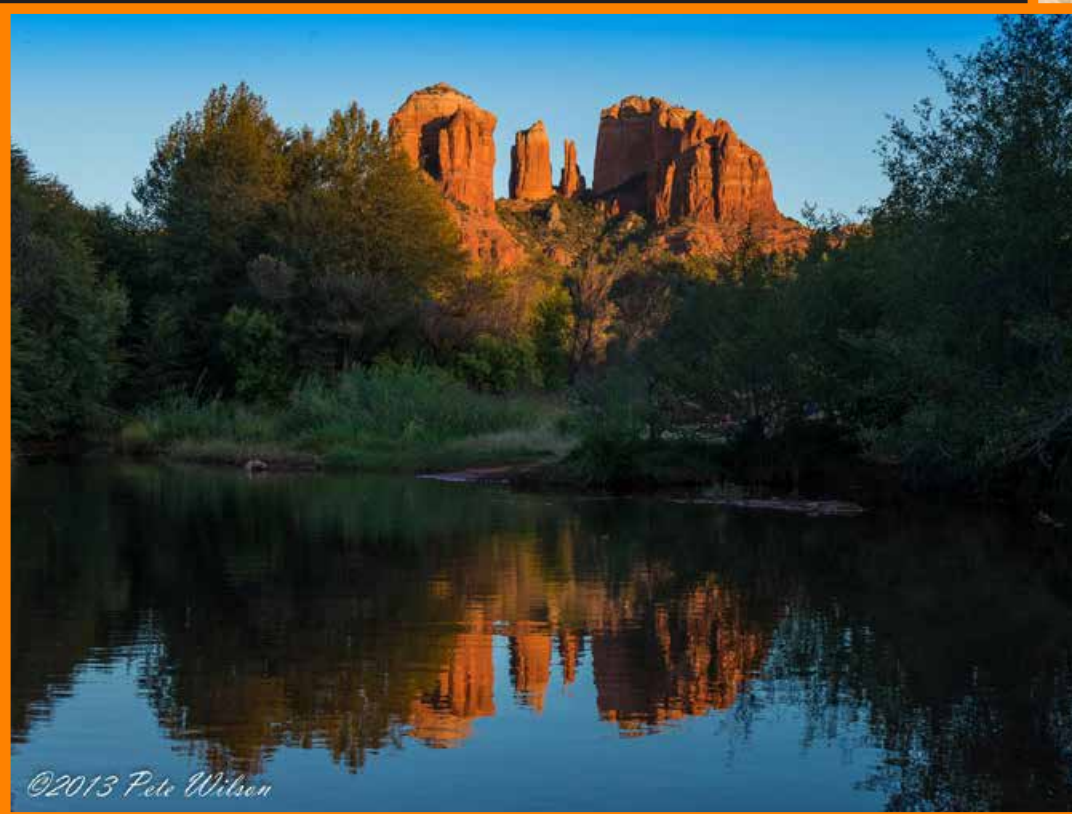
Pete Wilson (Pete Wilson)
Georges Pauly. Taken after sunrise up on the Vortex in Sedona,
converted to black and white in Lightroom 5 using channel mixer

Nikon D800, Nikkor 70-200mm f/4 VR, 1/200 @ f/4, ISO 100

©2013 Pete Wilson

Pete Wilson (Pete Wilson)

Little painted desert.
Nikon D800, Nikkor 70-200mm
f/4 VR (love this lens), f/8, 1/80s, ISO 800



Pete Wilson (Pete Wilson)

Cathedral rock at sunset
Nikon D800, Nikkor 24-70mm f/2.8, 1/60 sec @ f/8, ISO 100



Pete Wilson (Pete Wilson)

David Mathre (or is it Santa Claus???)

Nikon D800, Nikkor 24-70mm f/2.8, 1/60 sec @f/2.8, ISO 100; handheld



Pete Wilson (Pete Wilson)

Wildflowers - taken outside of Chloride, AZ at the murals.

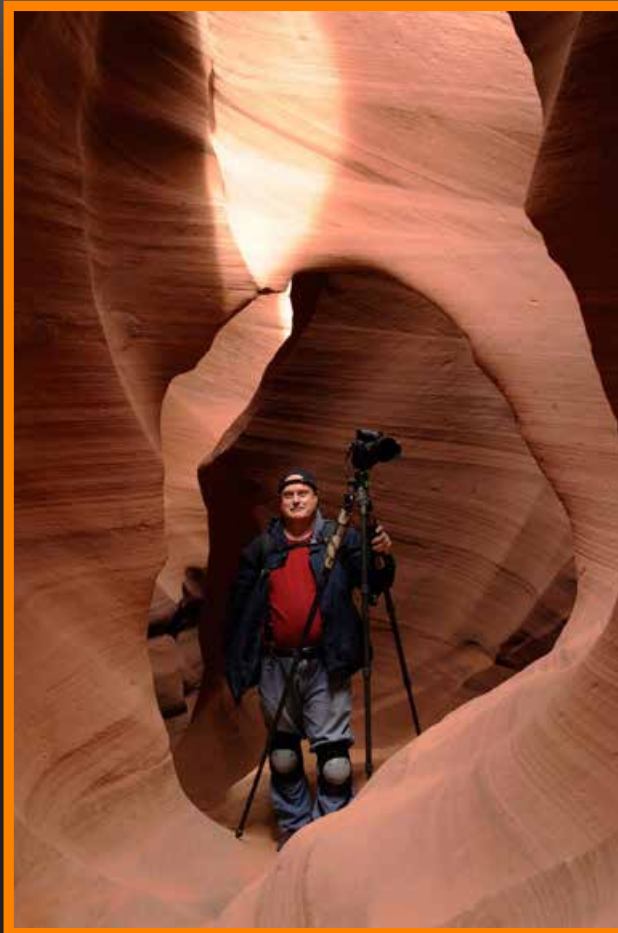
D800, Nikor 24-70 f2.8 lens @ 70mm,
f/2.8. 1/1000 sec. ISO 800, handheld.



Phil Boggs (photo_phil)
"Safety first"

Walked into this old recreation of a miners' cabin and saw this helmet setting on the red union suit. A perfect subject for me.

Nikon D700 with 24-70mm lens



Phil Boggs (photo_phil)
"My photo-buddy"

Used Pete Wilson as a model for size comparison of the slot canyon. The circular opening made a good subject frame.

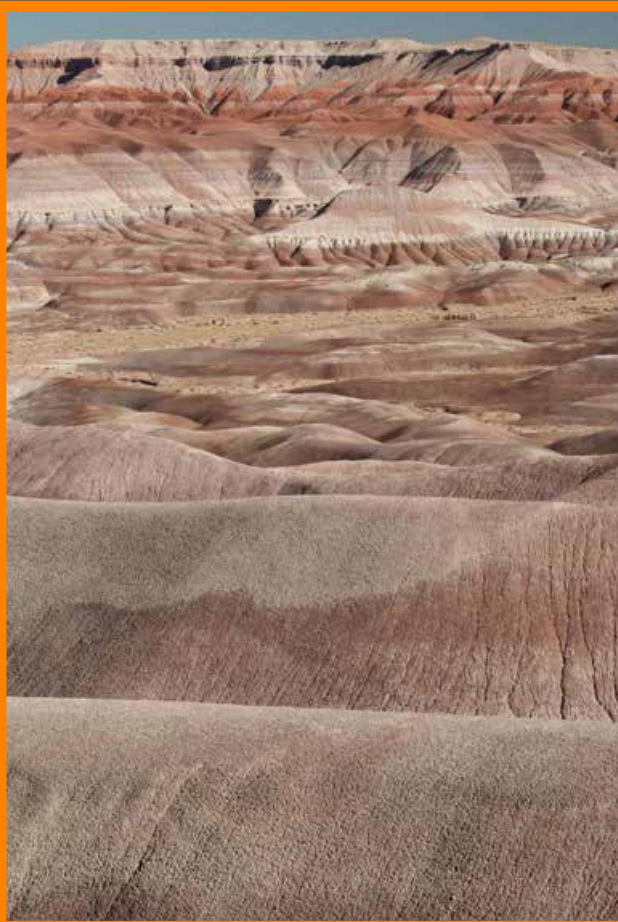
Nikon D700, 24-120mm lens



Phil Boggs (photo_phil)
"Stairway to haven"

Looking for something different in subject matter in the slot canyon area. Found the hard lines of the stairs to work well providing a contrast with the soft shapes of the slot walls.

D700, 24-120mm



Phil Boggs (photo_phil)

Was looking for some foreground elements for this scene. Found this large cactus to fill in the foreground.

Shot with my Nikon D700 and 24-120mm lens.

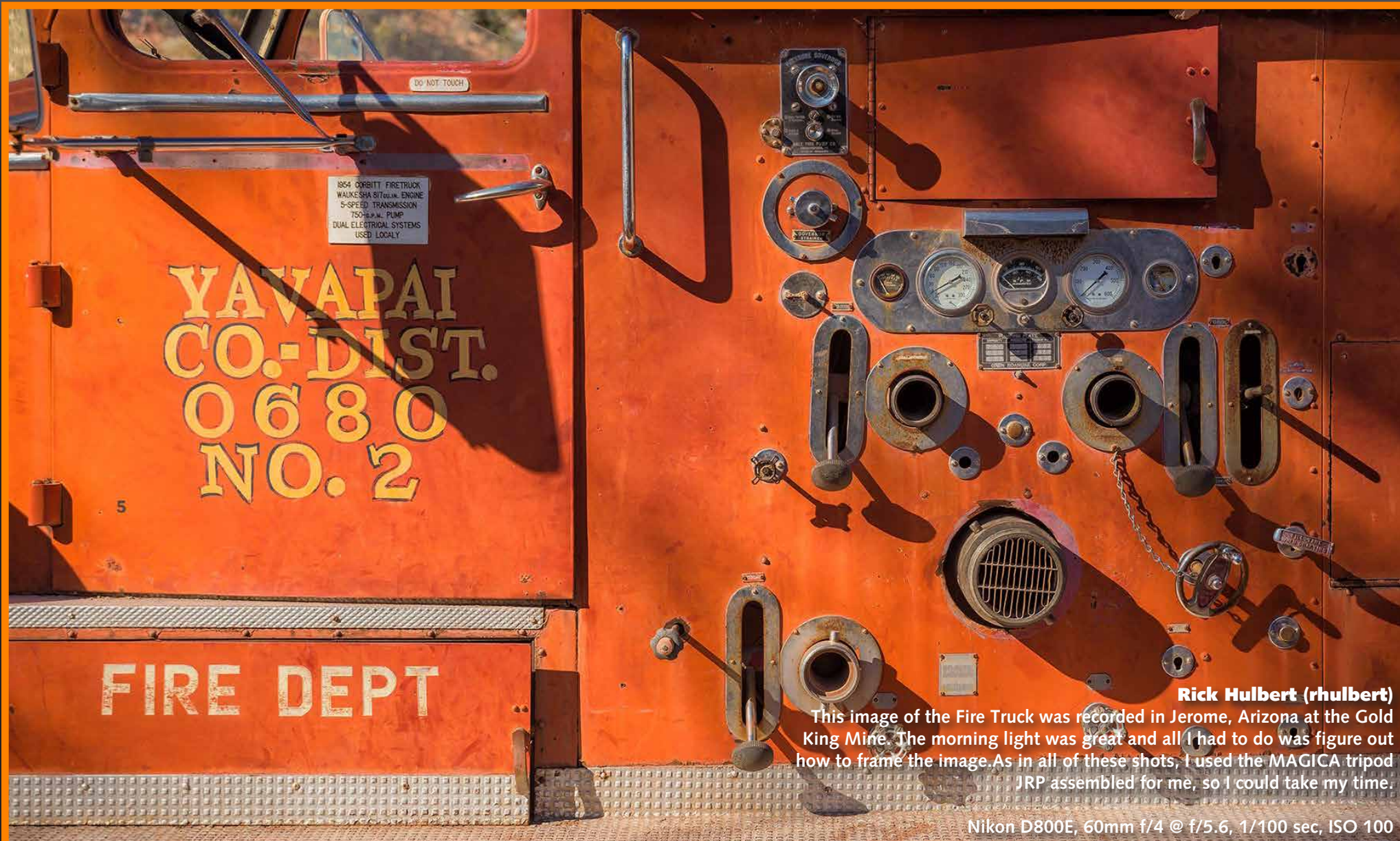


Phil Boggs (photo_phil)

"Little Painted Desert"

Took an old washed out trail down toward the desert floor. This gave me a chance to get this close telephoto shot to show the color and shape change.

Nikon D700 with 70-200mm f/4 lens.



Rick Hulbert (rhulbert)

This image of the Fire Truck was recorded in Jerome, Arizona at the Gold King Mine. The morning light was great and all I had to do was figure out how to frame the image. As in all of these shots, I used the MAGICA tripod JRP assembled for me, so I could take my time.

Nikon D800E, 60mm f/4 @ f/5.6, 1/100 sec, ISO 100



Rick Hulbert (rhulbert)

This is a Very Early Morning Sunrise shot. All I had to do was anticipate where the light would fall and be patient. We were very near our hotel in Sedona, Arizona.



Rick Hulbert (rhulbert)

This image is of Horseshoe Bend near Page, Arizona.

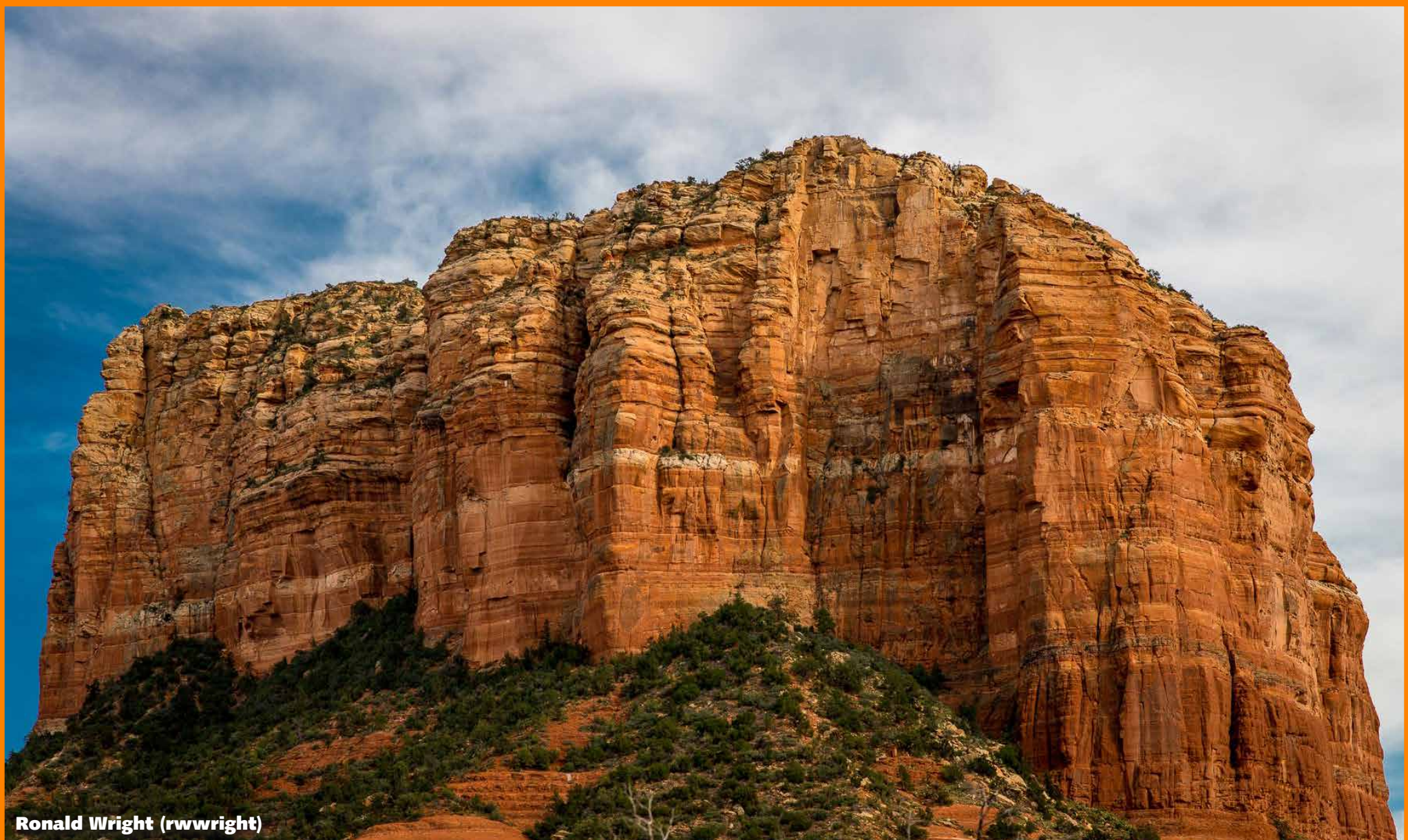
I crawled to the edge, sit up my tripod, and placed it as close to the canyon wall as possible. I then bracketed 9 exposures using my 14-24mm f/2.8 lens set at 14mm and 100 ISO and said a little prayer. I used just one of the D800E images and processed it in Lightroom 5. The dynamic range of the D800 series cameras is absolutely amazing and I used all 14 stops of light that was recorded. In the end I only needed the shot that had no exposure bias or compensation. The meter nailed it!



Rick Hulbert (rhulbert)

Lower Antelope Slot Canyon

This was my first visit to the slot canyon and while it is so tempting to look horizontally along the canyon walls, this image is taken in horizontal composition however looking straight up.



Ronald Wright (rwwright)





Introduction

Light is the sine qua non of photography.

Without light, there can be no photography.

This simple statement sets the stage for a discussion of light, one of the four major variables of a properly exposed photographic image, the other three being shutter speed, aperture, and ISO. Digital cameras applying automatic exposure modes are solving the equation that defines the relationship between these four variables.

The visible light that humans perceive is a tiny portion of the much larger electromagnetic spectrum that includes infrared light, radio and television broadcast frequencies, ultraviolet light, X-rays, and many others. Colors come in an infinite variety ranging from black -the absence of color- to white, the presence of all colors.

We perceive light emitted from sources like the sun, distant stars, street lights, incandescent bulbs, fluorescent tubes, candles, and others. We perceive light emitted from slide projectors, and television and computer monitor screens. We also perceive light that is reflected off printed materials and three dimensional objects. Emitted and reflected light comes in a bewildering, essentially infinite, array of colors.

Some illuminants, like the rising or setting sun, candles and fire place flames, are perceived by humans as "warm". Light on a cloudy day is perceived as "cool". Other illuminants will fall somewhere between these extremes.

In order to capture a color image as accurately as possible, photographers must have some understanding of the nature and color of the various illuminants involved in the scene, and tell the camera how to record them. This process is called setting the White Balance, which is a term describing the expected "color temperature" of the illuminant(s).

In the film era, white balance (WB) was simpler. Color film came in three basic, white balanced emulsions: One balanced for use outdoors in daylight and two balanced for

indoor use with incandescent photofloods. Gel filters could be used on camera lenses or illuminants to achieve a desired uniform white balance for a specific film emulsion. Today's digital cameras, from the simplest point and shoot to the most sophisticated DSLR, contain a bewildering array of WB options and features.

This article presents a brief introduction to white balance designed to remove some of the mystery surrounding the concept and provide readers with an approach to achieving accurate color renditions in their photography. It begins with a brief discussion of three-color vision in humans, followed by the visible portion of the electromagnetic spectrum and the use of degrees Kelvin to describe the range of colors contained therein.

The human eye/brain system is discussed, as it plays a significant, but often unnoticed, role in our perception of color. The white balance choices available in digital cameras are explored, and the advantages/disadvantages of each type discussed.

An overview of the numerous opportunities for the introduction of slight color shifts through the color management work flow from pre-camera to post-production follows.

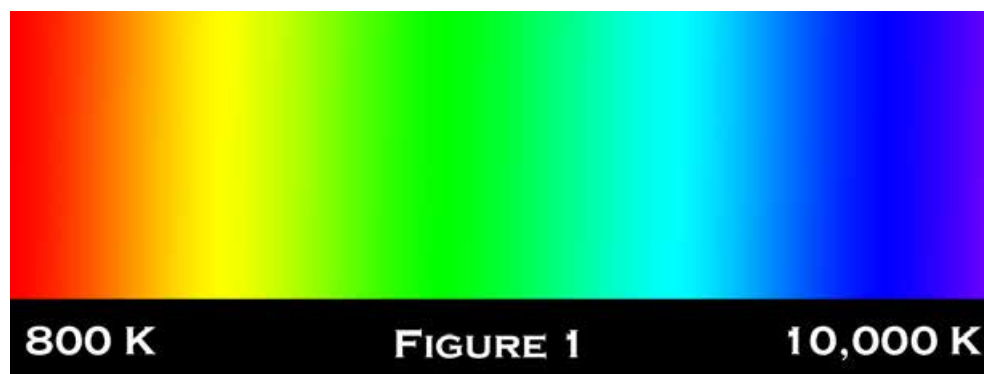
It concludes with a brief discussion of mismatched white balance and color temperature illumination, and the effect of exposure on color images.

The interest in color capture and rendition spans a broad spectrum of photographers, from those who set their cameras on Auto White Balance and leave them there, to those who acquire color temperature meters in pursuit of the most accurate color capture and rendition possible throughout their work flow.

The following pages present my current, and still incomplete, understanding of color theory and management. As the hardware, software, optical physics and related disciplines continue their accelerating evolutionary paths, I will no doubt have to evolve with them ... or fall by the wayside.

Human Three Color Vision

Color vision has been studied for centuries, and continues to attract significant research. Isaac Newton (1642 - 1727) was one of the first to investigate color perception in humans when he used his simple prism to discover that sunlight consisted of the familiar visible spectrum from red through orange, yellow, green, blue, indigo, and violet as illustrated in **Figure 1** below.



Thomas Young (1773 - 1829) suggested that humans have sensors in their eyes that respond to three basic colors; red, green, and blue. We cannot prove that an object has an intrinsic color. All we know is that the human eye/brain system responds to the various wavelengths of light reflected from or emitted from an object.

Irwin G. Priest (1886 - 1939?) studied color perception in humans by testing numerous observers ability to distinguish colors that are very close together. He formulated the Mired (Micro Reciprocal Degree) system for identifying colors across the visible spectrum in uniform steps, system that is in use today. Using this system, an average observer can distinguish between two colors that are only ten mireds apart.

Color Temperature and Degrees Kelvin

Physicists use the term "Perfect Black Body" to describe an object that absorbs all electromagnetic radiation falling on it, including visible light. It reflects nothing, and would appear as a solid black space, devoid of surface features. Although physicists can approach a true black body, the laws of thermodynamics preclude the manufacture of a perfect black body.

Assume such a black body is at absolute zero, the point at which all atoms have no thermal energy ($-273.15^{\circ}\text{C}/-459.67^{\circ}\text{F}$), and can therefore emit no radiation of any kind, including visible light, and we start to apply heat to it.

Color temperatures are measured in Kelvin degrees ($^{\circ}\text{K}$), which are the same as Celsius degrees, starting at absolute zero. At about 800°K above absolute zero, the black body emits a dull red glow that the average human eye can perceive. With the addition of more heat, at about $1,200^{\circ}\text{K}$, the color changes to a reddish yellow. At about $5,000^{\circ}\text{K}$ the color is a distinct blue.

The use of a lower Kelvin temperature to describe a visually "warmer" color, and a higher Kelvin temperature to describe a visually "cooler" color, is counterintuitive to many people. Remember that the Kelvin figure represents the thermal temperature of the black body above absolute zero, which is in contrast to our human perception of the radiated colors. We equate red colors with "warmth" and blue colors with "cold". For example, the tip of an oxyacetylene torch flame is a bright blue color, burning at something around $6,300^{\circ}\text{K}$.

The Human Eye/Brain (EB) Processing System

The human E/B system is constantly working in the background to present us with color images. Sensors in the eye's retina transmit electrochemical signals to the brain which then presents us with the perception of color. Over time, the E/B system learns what we expect to see. For example, we think of a white dress shirt as white, whenever and wherever we see one. Similarly, we consider a sheet of typing or copier paper as white wherever and whenever we see one. It does not consciously occur to

White Balance: Why is it important?

by Hal Byron Becker (HBB)

us that the white color we see is influenced by the color temperature of the illumination falling on it because the E/B system presents it to as we expect to see it ... white.

I frequently show visiting photographers a color photograph with a white border around the edges. I hold it under some tungsten/halogen track lights at about 2,700 °K and ask them what color is the border. The response is almost always "white". I then take them into a room with overhead fluorescent tubes color balanced to about 5,200 °K or so and ask them the same question. Here again, the answer is usually "white". I then return to the track lights and ask them to look at them and tell me what color light they are emitting. They will usually say yellow, or reddish yellow. I then ask them to tell me again the color of the border around the color print. Now, the lights come on and they will say it is an off-white to light tan color. We return to the color balanced fluorescents and they can now see that the border has a definite blue cast.

This simple exercise demonstrates that the color temperature of the illuminant has a definite effect on the perceived color of an object. What is occurring is the eye/brain system is presenting us with what we expect to see, not what we are actually seeing. With practice, the eye/brain system can be turned off which allows a much more objective evaluation of color temperatures.

White Balance Options in Digital Cameras

Modern digital single lens reflex cameras do not have the eye/brain system's ability to automatically present us colors as we expect to see them. They simply capture colors as they exist, with no interpretation. Here, white balance enters the picture. We must tell the camera what color temperature to expect when we push the shutter button. Thus, digital cameras offer a range of user selectable white balance options in an effort to accommodate a fairly wide spectrum of color temperature illuminants.

Digital camera white balance options fall into four major categories: Auto, Preset, Custom, and Preset Manual. The goal of each of them is to present the captured images in as realistic a color rendering as possible, given the illumination at the scene.

Nikon uses the following white balance temperature figures in many of its cameras. A few of the white balance choices from another well known camera manufacturer are shown below for comparison.

Setting	Range in Kelvin Degrees	
	Nikon	Other
Auto	3,500 - 8,000 °K	
Presets		
Incandescent	3,000 °K	3,200 °K
Fluorescent		
Sodium Vapor	2,700 °K	
Warm White	3,000 °K	
White	3,700 °K	4,000 °K
Cool White	4,200 °K	
Day White	5,000 °K	
Daylight	6,500 °K	
High Temp.		
Sodium Vapor	7,200 °K	
Direct Sunlight	5,200 °K	5,200 °K
Flash	5,400 °K	6,000 °K
Cloudy	6,000 °K	6,000 °K
Shade	8,000 °K	7,000 °K
Custom	2,500 - 10,000 °K	2,000 - 10,000 °K
Preset Manual	Use of light source, photograph, etc. for reference.	

White Balance: Why is it important?

by Hal Byron Becker (HBB)

Other camera manufacturers use different Kelvin figures for their white balance settings as shown above. In theory, identical images taken with a Nikon camera and the other camera cited above, under identical lighting, and post processed identically, would result in slight color differences that are visible to the average observer. All of them are between eighteen and twenty mireds apart, well beyond the ten mired figure established by Irwin G. Priest.

While these white balance choices cover a number of different color temperature illuminants, they do not offer the photographer much in the way of selecting them with any accuracy.

Nikon Auto white balance works quite well when confronted with a single color temperature illuminant that is within its 3,500 °K to 8,000 °K range. Two or more illuminants can be a problem, particularly if their color temperatures are quite different.

The Preset selections work somewhat better, but rely on the photographer to accurately assess the color temperature of the illuminant(s) and make an appropriate choice.

The Custom option offers the greatest range and flexibility, but again requires the photographer to make an accurate assessment of color temperature(s) involved in the scene. This level of accuracy usually requires the use of a color temperature meter.

Several years ago, I acquired my first color temperature meter, the Minolta IIF. I carried it around for weeks, measuring every color temperature illuminant I encountered. This was an invaluable learning experience that taught me many things.

The Preset Manual option involves the use of a white or gray card, or a color chart, which is included in one of the images captured under the illumination at the scene. These cards or charts are then used in post processing to identify white, gray, or some other color. Care should be advised when using these cards/charts under illuminants that are clearly not anything close to direct sunlight at 5,200 °K. Nightclub and stage lighting are one example. Correcting color in post processing to direct sunlight may produce an image that does not resemble the scene under the existing ambient

illumination. Again, color management is a very personal, subjective pursuit. Our eye/brain system is constantly adjusting our perception of color throughout our waking hours. We normally are not conscious of the constantly changing color temperature of daylight as the sun marches fifteen degrees per hour across the sky. We do not consciously notice the change in color temperature when clouds move in and out of our area. My color temperature meter made it clear that daylight color temperature is constantly changing, even on cloudless days.

Moving from tungsten illumination indoors to daylight outdoors is a dramatic shift in color temperature that usually goes unnoticed, as white shirts are still perceived as white.

For those interested in using the preset white balance selections, I suggest renting a color temperature meter and carrying it around for a while, measuring every illuminant you encounter. This will give you increased confidence in selecting appropriate white balance options.

For those interested in gaining the accuracy achievable with the custom white balance option, a color temperature meter is a necessity in my experience. I currently use the Sekonic C500R color temperature meter and find it a very useful tool.

Color Management and Workflow

Photography involves capturing a three-dimensional scene or subject for later presentation in a two-dimensional medium. One of the goals is usually to capture the colors of the scene as accurately as possible. Color management begins prior to pushing the shutter button and ends when the processed image is in its final form for viewing. In between these events are numerous opportunities for slight color shifts to occur, that may or may not be noticed.

From beginning to end, the color image is interpreted by a number of hardware/software systems and perceived by one of more humans engaged in the post processing work flow.

White Balance: Why is it important?

by Hal Byron Becker (HBB)

Perception One. The photographer views the scene/subject, evaluates color temperature of the illuminants and selects an appropriate white balance setting. For those interested in highest possible image quality and color fidelity, metering the color temperature, selecting a custom white balance figure, and shooting in uncompressed RAW mode at greatest possible color depth are essential.

Interpretation One. The camera records the image digitally, and stores it on appropriate media. The user may have selected one or more in-camera processing functions, such as saturation, contrast, etc., that will modify the image colors beyond the selected white balance. Photographers interested in most accurate color will usually turn all of the camera's color processing functions off, or set them to their neutral values.

Perception Two. The photographer views the image on the small LCD screen on the back of the camera. While useful for assessing composition, histograms and highlights, this image is of little value in evaluating color fidelity.

Interpretation Two. The photographer loads the image into a computer and brings it up on the monitor screen. Monitors vary widely in their ability to accurately display a color image. Some monitors can display the smaller sRGB color set only, while other more expensive monitors can display 98 percent or more of the richer Adobe RGB 1996 color space.

Calibration and profiling of monitors will bring the displayed image closer to the version stored in memory. For accurate color rendition this is essential.

Perception Three. The photographer views the image on screen and tries to remember how closely it resembles the original scene/subject. Color memory seems to fade quickly once the image has been captured and the photographer leaves the scene. This is the major reason for capturing the image with the most accurate white balance possible.

Perception Four. The photographer modifies the image, possibly in several ways, using one of the popular image processing applications available. Changes to white

balance, saturation, white/black points, contrast, exposure, and other image qualities are possible, all of which alter the originally capture version.

Some photographers are interested in capturing images and will do minimal post processing in an effort to retain the image as they remember it at capture time. Others like to create images, and will modify images extensively until they barely resemble the original. Color management and post processing work flow are very subjective, personal activities.

Interpretation Three. If the image is to be printed on an ink jet printer for example, four new variables enter the discussion. First, a given printer from the thousands of models available is selected. Design variations between manufacturers and even between different models from one manufacturer can be considerable.

Second, once the printer is selected, that determines the ink set that will be used to produce the print. Ink sets are either dye or pigment based, and each has its advantages/disadvantages. Early color printers had three colors: cyan, magenta, and yellow, plus black. As the printer and ink technologies advanced in pursuit of more accurate color, the number of inks increased. The current Epson P7900, for example, has eleven different cartridges in its Ultra Chrome High Dynamic Range (HDR) ink set: two cyans, two magentas, one yellow, four blacks, one green and one orange.

Third, a specific paper from the thousands available is selected for the color print. It can be glossy, semi-gloss, matte, high or low brightness rating, possibly treated with optical brightening agents, and other factors that will affect the color rendition of the image.

Fourth, the photographer selects a printer profile for the selected paper which is a numeric table used by the printer driver, designed to provide the best match between the ink set and the paper for the selected printer.

Perception Five. The photographer views the image as it emerges from the printer, looking at composition, overall density, and for obvious flaws such as clogged heads, incorrect profile, etc. This is not a good time to make a final assessment of the images

Perception Six. Following adequate drying time, which can be several days depending on paper type, humidity, temperature, etc., the print can be viewed with color balance in mind. At this point, the color temperature of the illuminating light source must be considered. Remember the exercise at the beginning of this essay ... the effect of the illuminant color temperature on a print?

Viewing an image captured under cloudy daylight with tungsten illumination will not provide the most accurate rendition. Similarly, viewing an image captured under tungsten illumination with daylight will not be an accurate assessment of color. Ideally, the print should be viewed under an illuminant that is as close as possible to that present at the time image capture. Not always possible, but a goal.

Perception Seven. For gallery quality prints, some consideration may be given to the color temperature of the illuminants at their final destination in the purchaser's home or office. Blue may be enhanced a bit for prints that will be viewed under reddish/yellow tungsten illumination, while red may be enhanced a bit for those that will be viewed under blue/white indirect daylight from a north-facing window. Prints hanging under multiple, different color temperature illuminants present a more complex question. Sticking with the original white balance color temperature may be the most appropriate approach.

Mismatched White Balance and Color Temperature

While slight differences between a selected white balance and the actual color temperature of an illuminant may not be visible, clearly mismatched selections will be immediately visible.

Figure 2 shows the result when the incandescent white balance is selected, and the image is captured under daylight illumination. The camera was expecting a reddish/yellow illuminant (3,000 °K), so it enhanced blue to bring the image up somewhere close to daylight (5,200 °K). Enhancing blue in an already blue image results in an even bluer image. This is the equivalent of shooting indoor, incandescent balanced film, outdoors under daylight illumination.

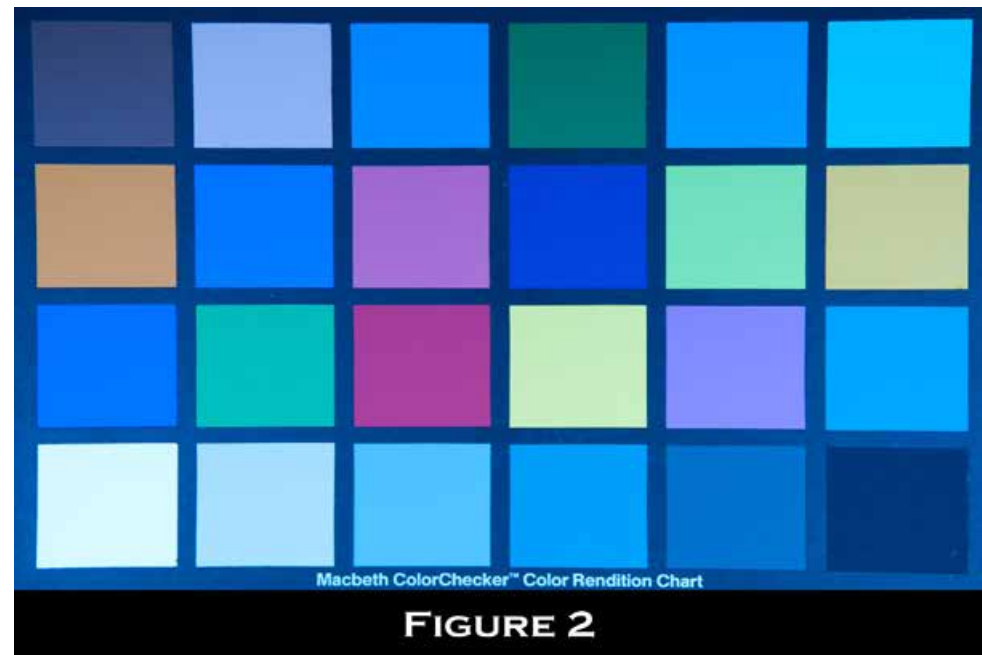


FIGURE 2

Figure 3 shows the result when the incandescent white balance is selected (3,200 °K) and the image is captured under incandescent illumination. The colors in the chart appear normal.

Figure 4 shows the result when the cloud white balance (6,000 °K) is selected, and the image is captured under incandescent illumination (2,800 K). The camera was expecting a blue/white illumination so it enhanced the red to bring the image down somewhere close to daylight (5,200 °K). Enhancing red in an already red image results in an even redder image. This is the equivalent of shooting outdoor, daylight balanced film, indoors under incandescent illumination.

White Balance: Why is it important?

by Hal Byron Becker (HBB)



Exposure and White Balance

While not exactly related, exposure can have a dramatic effect on colors in an image. All cameras with automatic exposure features use light reflected off the subject for exposure calculations. Reflected light metering systems will try and render all images in a neutral tone. This results in bright white subjects, like snow scenes and brides in white dresses, being underexposed by a stop or two, appearing an off-white gray. Similarly, very dark subjects like a groom's party in black tuxedos being over-exposed, also appearing an off-white gray.

Taken to their extremes, over-exposure will render any color white, while under-exposure will render any color black.

Figures 5 through 10 below show pieces of fruit on three different backgrounds: white, gray, and black. **Figures 5, 6, and 7** were captured using the camera's reflected light metering system in matrix mode at a constant f/8.0 aperture. Notice how close



White Balance: Why is it important?

by Hal Byron Becker (HBB)

GRAY



FIGURE 6 D3 1/6 SEC @ F/8.0

BLACK



FIGURE 7 D3 1/3 SEC @ F/8.0

the white and black backgrounds match the middle gray background. Notice how the shutter time and exposure on the fruit varies: The fruit on the white background (Figure 5) is under-exposed, the fruit on the gray background (Figure 6) appears close to normal, and the fruit on the black background (Figure 7) is over-exposed.

To compensate for reflected metering system bias, photographers must learn to adjust exposures accordingly, by deliberately over-exposing bright white subjects and deliberately under-exposing dark subjects. Time and practice are required to become proficient in this exercise.

Figures 8 through 10 were captured using a Sekonic L758DR incident exposure meter at a constant 1/10 second shutter speed and constant f/8.0 aperture. Notice the backgrounds: on a calibrated monitor the white paper (Figure 8) appears white, the gray paper (Figure 9) appears gray, and the black paper (Figure 10) appears black. The same exposure for the three images results in the fruit being properly exposed in all of them.

WHITE



FIGURE 8 L768 1/10 SEC @ F/8.0

GRAY



FIGURE 9 L768 1/10 SEC @ F/8.0

BLACK



FIGURE 10 L768 1/10 SEC @ F/8.0

Conclusion

White balance is a major component in color management work flow. The pursuit of “perfect” color in the work flow is a chimera: It doesn’t exist. Put another way, the pursuit of “perfect” color is asymptotic: We can approach it, but never actually achieve it, due to the many variables encountered in the work flow.

Color management and white balance encompasses a broad spectrum of variables that can be intimidating. However, any given variable is readily understandable when taken independently of the others; it is less complicated than it sounds. Start simply at the beginning and work through them in sequence until the structure of a personal work flow emerges. Then dig deeper into the details. Work flow and color management are very personal and subjective activities. No two photographers will produce identical work flow and color management systems. There is no one size fits all work flow model.

Finally, remember that no two people will perceive a given scene or subject in exactly the same manner. Nor will they perceive the colors in the scene or subject in the same manner.

White balance and color management are fun stops along the path called photography: A journey with no conceivable destination.



Markins ball heads keep on getting better and better. The new [Markins i-Type ball heads](#) incorporate several improvements over their already existing remarkable characteristics in the World Pro Class.

They are now prepared to take on the optional BV attachment, for easier and less obtrusive Birds photography and Video making. They also have new clamps, lever and knob type at your choice, with laser engraved markings for easier and precise positioning of your camera and lens.

Those new clamps on the i-Type ball heads are now fixed to the ball head with a PH screw for better contact and easier change or replacement.

Furthermore, the knob type clamp now also has a stronger shaft for further protection against bumps and shocks and it locks or unlocks with a single turn, making it much faster to use. The i-Type ball heads come in two sizes, Q10i and Q20i. The BV attachments too, as BV-12 and BV-22

The [Lightning Bug](#) is a remarkable electronic instrument to help you shoot the elusive lightning images at the right moment and with the right exposure, allowing you to remain in total control. Sensitivity can be modified to capture all lightning or just the largest ones.

You can also control the number of images that the camera may take within a second. We have found this feature most useful to capture repeated lightning strikes successfully. Designed to withstand rain, it has weather resistant push buttons for you to change your settings in the field. It also has a PC port to allow for illuminating foregrounds with a speedlight.



Photo Pro Shop News



[Glide Gear](#). For our video enthusiasts, we were lucky to finally find a complete line of very well made, robust, efficient and yet relatively inexpensive set of accessories for video.

And the specials continue on [Nikonians Merchandise](#).

Check them all out at your [PhotoProShop](#).



[GURA GEAR BAGS](#). The quest for the perfect backpack may very well be over with these bags. Designed by photographers for photographers, they are carry-on complaint, fit a little or a whole lot of gear. Are particularly well made and carry a 5-year warranty. And most importantly: the well designed harness makes them a joy to carry around on a short or long trek.

They come in three sizes to better fit your needs: 18L, 26L and 32L, where the L means Liters of typical capacity. Also, check the great Sabi bean bags.



The [SOLMETA Geotaggers](#) remain one of the best values in the market for adding precise coordinates and more to the EXIF data of your images. The 2nd generation of the Pro model, the Pro 2, leads providing features like:

- Improved High-contrast LCD GPS data display.
- 2GB GPS log space, easy to download.
- 3-axis E-compass, 2.4GHz shutter remote.
- Built in battery that saves Nikon camera's power.

The Five Elements of Great Portraiture

by Greg Stangl (profotoguy)



Professional photographer Greg Stangl is a veteran photographer, writer, educator, and Nikonians Academy Workshop Leader. Greg earned his Master's Degree in Photography in 1985. Articles by him have been published in 10 professional photography magazines and he has had numerous nationally award winning photographs.

When teaching my Nikonian Academy portraiture class, one of the first lessons that I share with my students are my 5 guidelines to great portraiture. Keep in mind that the following points are just that, simply guidelines, not hard fast rules.

According to Wikipedia, a portrait is a painting, photograph, sculpture, or other artistic representation of a person, in which the face and its expression is predominant. The intent of any portrait is to display the likeness, personality, and even the mood of the person. For this reason, in photography a portrait is generally not a snapshot, but a composed image of a person in a still position. A portrait can show a person looking directly at the painter or photographer in order to engage the subject with the viewer. In candid portraiture, the subject is often not aware that they are being photographed.

These "elements" are not written in any particular order and do not apply to every portrait.

1. Limited Depth of Field

In traditional portraiture, we often want the subject to be the main focus of the image. In photography, we will often choose limited depth of field to make the subject stand out from the background. Depth of Field is the area in front of and behind the point of focus that is in relative focus. I like to use a longer lens, often a 150-200mm set on its widest aperture. The combination of a longer lens and wide opening will often blur the background causing the visual interest to be on the subject. When using a longer lens, I often use a monopod, camera stand or even a tripod when photographing portraits, to assure the subject is sharp.

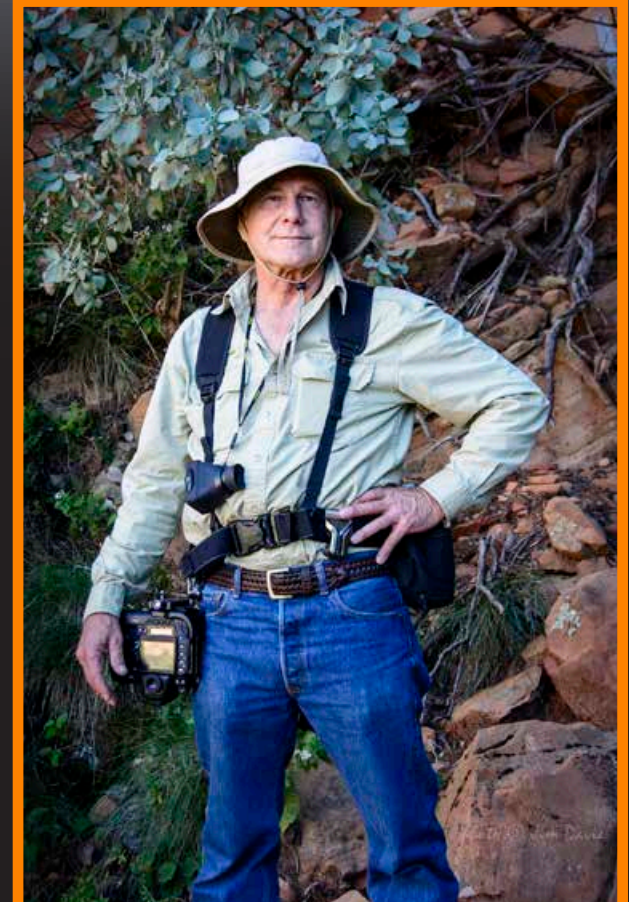
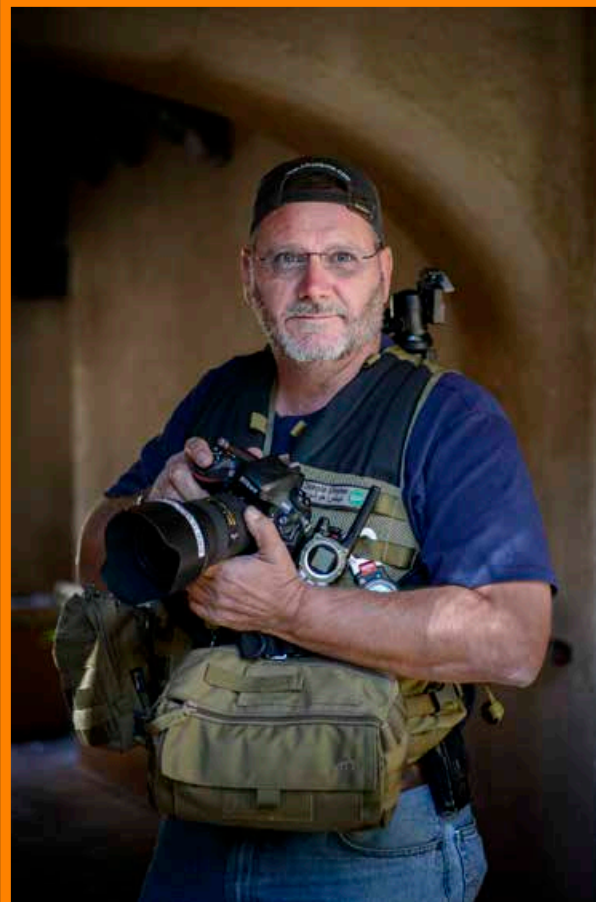


2. Directional Light

In most studio and window light portraits, I prefer to create images where there is an obvious established direction to the lighting. Whether I am using mono-light, window light, light from the open sky or the setting sun, I like to see the light paint across the face and create magic and texture. Proper portrait lighting usually follows the 45/45 rule: that is the main light is about 45 degrees above the subject and 45 degrees off to the side. Use of directional light and correct lighting ratio can help to create the mood of the portrait and also help the subject to gain or lose weight.

The Five Elements of Great Portraiture

by Greg Stangl (profotoguy)



3. Lack of Mergers

In most portraiture, the photographer will work to eliminate distracting elements from the background or foreground of the portrait. Bright bursts of light areas, busy wall coverings, trees or buildings can cause the viewer to skip past the subject and focus on the background. When an object in the background creates attention, it can take interest away from the subject which should be the visual interest. A common Photoshop or Lightroom technique is to darken the edges of the image to focus the visual attention onto the subject.

The Five Elements of Great Portraiture

by Greg Stangl (profotoguy)

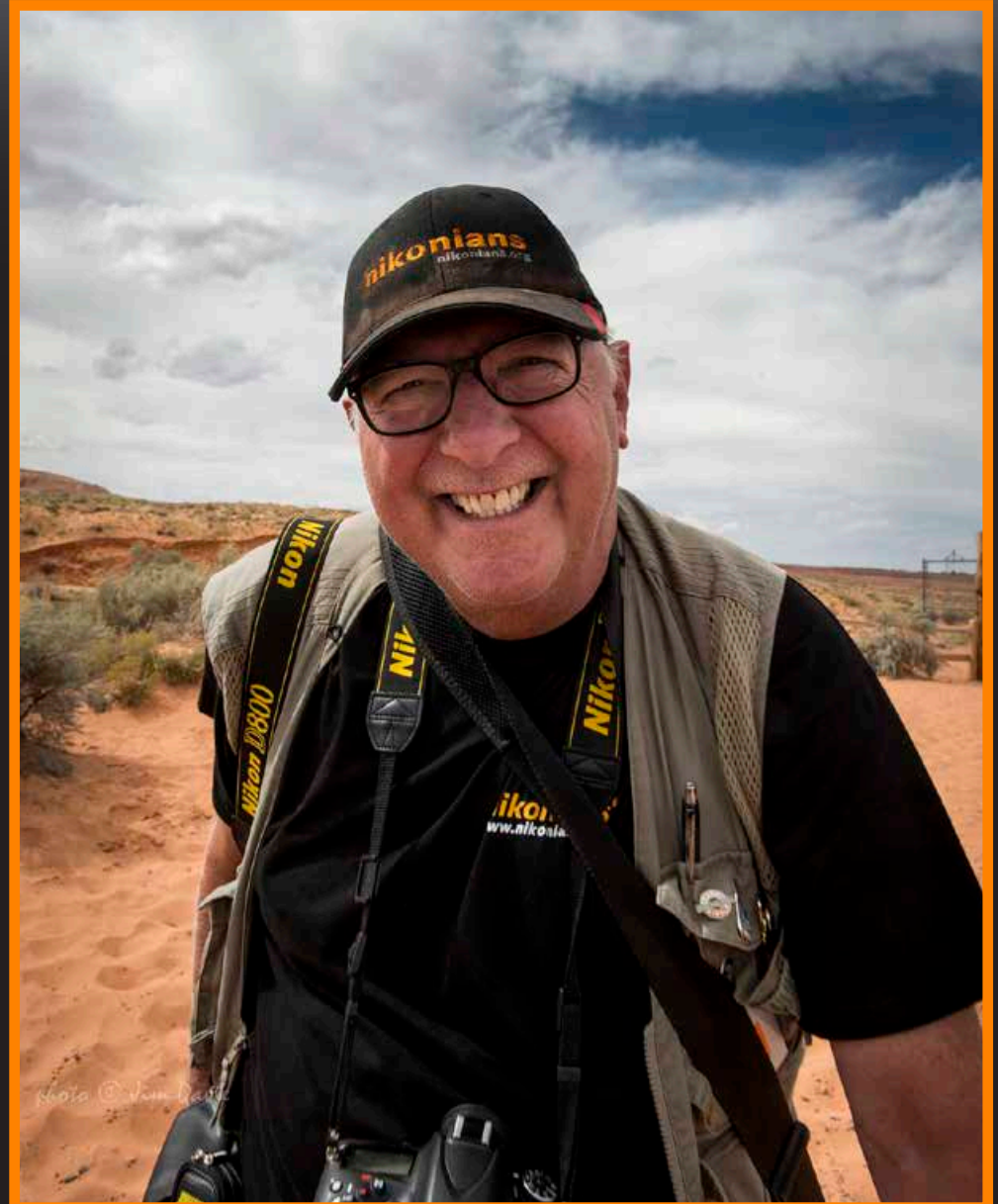
4. The Magic of Expression

There is an old saying in professional portraiture: ESP or the Expression Sells the Portrait. It's important to learn to capture the expression as well as create it. Sometimes I want the subject to smile or laugh and I will talk to the subject to try to elicit that expression. When creating candid or environmental images, expression is less important. I have created successful portrait images where the subject is facing away from the camera and the viewer is left to guess what the subject is thinking or doing.

5. No Fear of Failure

One of the challenges that I face in creating portraits is that I have had to wear many different hats in my creative lifetime. I have worked professionally as a photojournalist, studio photographer and candid street photographer. It is an entire different mindset when moving from creating traditional studio portraiture to candid environmental portraits: the lighting, the composition and the posing all change. My interaction with the subject changes from the position of being in complete control to the focus of simply being an observer. And that is what makes portraiture such challenging and complex yet exciting type of photography.

All portrait examples shown were made by Jim Davie (jay dee) at ANPAT 13.



Calendar

Coming Soon from the Nikonians Academy Staff

Steve Simon takes the Masters series to Atlanta starting December 4th, His schedule includes:

- Master the Nikon D600, D7000 & D7100 - In Depth 1 (December 4)
- Master the Nikon D800 and D4 - In Depth 1 (December 5)
- Master the Nikon D800 and D4 - In Depth 2 (December 6)
- The Passionate Nikon Photographer Two-Day Mastery Workshop (December 7-8)

Steve will be taking the same series to [Philadelphia](#), starting December 12.

Mike Hagen finishes out the year hosting the Masters series in [Phoenix](#), starting December 5, and in [San Diego](#), starting on December 12.

Looking ahead to 2014

The [Nikonians Academy](#) curriculum includes the most popular workshops mixed with challenging outdoor adventures.

Academy Director Mike Hagen takes the lead in January, bringing the Masters series to [Orlando, Florida](#) (Jan 9-12).

February finds Richard Hulbert in San Francisco (starting Feb 6) and Dallas (starting Feb 20) leading his four-day [Urban and Street Photography](#) Workshop.

Meanwhile, Jim Stamates brings his [Bald Eagles of Klamath Basin Photography Workshop](#) to Oregon starting on February 12th, and Michael A. Mariant leads the [Yosemite in Winter: A Season of Contrast](#) photo adventure starting on February 20.

For links and course descriptions to all Nikonians Academy workshops and photo adventures check the [Nikonians Academy homepage](#).

New Photography 2013

September 14, 2013–January 6, 2014

The Museum of Modern Art (MOMA), New York, NY

MOMA presents recent works by eight international artists who have expanded the field of photography as a medium of experimentation and intellectual inquiry. Their porous practices—grounded in photographic artist's books, sculpture, photomontage, performance, and science—creatively reassess the themes and processes of making pictures today.

For more details go to <http://www.moma.org/visit/calendar/exhibitions/1381>

PhotoPro Expo

February 6-10, 2014

Midwest USA

The PhotoPro Expo is coming to northern Kentucky, Covington, KY and the Greater Cincinnati, Ohio. There are tons of speakers including many you might expect to see at other photography trade shows. It is being billed as the largest Photographic Expo Trade-show in the Midwest with over 100 booths.

For more details go to <http://photoproexpo.com/>



The Photography Show National Exhibition Centre in Birmingham, UK Saturday 1 March, 2014, to Tuesday 4 March, 2014

Future Publishing, the specialist media group that publishes Digital Camera World, has unveiled The Photography Show, a major new consumer event that will take the place normally held by Focus on Imaging in 2014 at the NEC in Birmingham.

This new consumer and professional event will combine highly interactive features to entertain and engage consumers, with dedicated conferences and events for the trade and retailer attendees. They will be featuring some of the biggest names in the photo industry who promise to unlock the secrets of their craft. The show floor will be brimming with hundreds of exhibitors and retailers, showcasing the latest cameras and accessories.

For details go to:

<http://www.digitalcameraworld.com/2013/06/26/the-photography-show-our-new-consumer-event-to-replace-focus-on-imaging/>

For difficult images, you need a Ninja.



Photo Ninja, the innovative RAW converter from PictureCode, includes world-class technology for taming harsh lighting, repairing blown highlights, reducing noise, and much more. Try it today, and see why it has earned a place in the toolkits of thousands of serious photographers worldwide.

Photo Ninja. Get more from RAW.

www.picturecode.com

New From Nikon

New DSLR's and Underwater camera highlight inventory additions

November 2013: Nikon's newest Digital Single-Lens Reflex created [quite a buzz](#) in our forums.

Nikon Df in Silver and Black



Announced in early November 2013, the Nikon Df is an FX (full-frame camera) with 16.2 million effective pixels. It uses a standard 36x24 mm CMOS sensor (36.0 x 23.9 mm). It has assumed the title of "Nikon's smallest, lightest FX-format body."

This may not be the camera you absolutely need -- But for many Nikon enthusiasts with warm memories of the good old days -- it is destined to become the camera they absolutely want.

Nikon's official announcement included background on the design process for this camera:

"When Nikon began designing the Df, mechanical operation was the natural choice since it provides the photographer with the tactile pleasure of shooting with precision mechanics."

Constant visibility and access to key camera settings reinforces the direct connection between photographers and their cameras, inspiring them to be more deliberate with each frame. In addition, the Df delivers the same image quality as the D4, Nikon's flagship D-SLR, but from a significantly lighter and more compact body.

Photographers can expect versatile image quality from ISO 100 to ISO 12800 — all without a large, cumbersome camera body. This significantly expands creative opportunities, while opening up completely new ones.

This camera fuses the D4 image quality with tactile precision mechanics for pure photography. With your fingers on the controls, you can think about photography differently, and explore your creative intentions more profoundly. With the Df, you are the photographer, not the camera."

Here are the highlights, courtesy of Geoffrey Colalter at the Nikon USA Press Room:

Nikon Df:

- Classic Nikon design cues, with solid build and mechanical controls
- Sophisticated physical/mechanical controls for settings and adjustments
- Imaging and low-light performance inherited from Nikon's flagship D4 D-SLR
- Large 36 x 23.9mm, 16.2 MP FX-Format CMOS sensor
- EXPEED 3 image processing engine propels image quality to the next level
- Exceptionally wide ISO range from 100-12,800, expandable to 204,800 for superb low-light performance
- Nikon's thinnest and lightest FX-format D-SLR
- 39-point AF system with nine cross-type sensors and continuous burst shooting up to 5.5 fps ensures precision and clarity when capturing moving subjects
- 2016-Pixel Matrix Metering and Scene Recognition System ensure proper camera settings for every shooting scenario
- Easy to create with a 3.2-inch LCD display and glass optical viewfinder
- Wi-Fi connectivity available with use of optional WU-1a Wireless Mobile Adapter, allowing for instant download and sharing to smart devices or remote firing of the camera



Nikon Df
Top view



New From Nikon

- Reaching back into the NIKKOR lens legacy, the Df is compatible with current AF, AF-S, DX and AF-D lenses, but also works with classic Ai and non-Ai NIKKOR glass
- Full compatibility with Nikon's Creative Lighting System and WR remote systems
- Started shipping in November 2013, in classic silver and black color schemes. The manufacturer's suggested retail price (MSRP) of the Df (body only) will be \$2,749.95 (USD), while the Df and 50mm f/1.8 Special Edition lens kit will have an MSRP of \$2,999.95*. The AF-S NIKKOR 50mm f/1.8G lens will be sold separately for an MSRP of \$279.95*.

AF-S NIKKOR 50mm f/1.8 Special Edition Lens

- Classically styled to honor original NIKKOR Ai lenses
- Sports aluminum mounting ring for manual focusing
- Classic 50mm prime focal length ideal for everyday shooting
- Features modern NIKKOR technologies
- Nano Crystal Coat, seven-blade diaphragm
- Started shipping in November 2013 for a suggested retail price (MSRP) of \$279.95, or alongside the Nikon Df for \$2,999.95 (MSRP)

AF-S NIKKOR 50mm f/1.8G



October 2013: Nikon's DSLR inventory adds the 24.2 megapixel CMOS sensor D5300 - Nikon's first DSLR with built-in Wi-Fi and GPS.

The October announcement also included the new [AF-S NIKKOR 58mm f/1.4G](#) - a prime lens with a hefty price tag and roots leading back to the legendary Noct NIKKOR 58mm f/1.2 lens. That "noct" is just what you think it is - it means shooting at night (as in nocturnal).

Here are the highlights:

Nikon D5300:

- This is Nikon's first DSLR with built-in Wi-Fi and GPS which provides instant photo sharing to smartphones or tablets. It also offers the option of geotagging image captures.
- Cutting-edge 24.2 MP DX-format CMOS sensor produces crisp and lifelike images
- Extremely compact and lightweight with an ergonomically designed body.
- Sports a 3.2-inch swiveling Vari-angle LCD display to help frame fun and creative shooting perspectives
- 39-point AF system with 9 cross-type sensors is able to capture moving subjects with ease
- Fast continuous shooting at 5 frames-per-second (fps)
- Full 1080p HD Video with built-in stereo microphone for fleeting moments
- Intuitive Scene Recognition System selects precise and accurate settings for every shot
- Features a variety of Image Effects and In-camera editing tools
- Available in October 2013 in Black, Red and Gray for \$1,399.95 MSRP (alongside the AF-S NIKKOR 18-140mm f/3.5-5.6G ED VR lens) or \$799.95 USD MSRP (body only)



Nikon D5300



AF-S NIKKOR 58mm f/1.4G

AF-S NIKKOR 58mm f/1.4G

- Versatile, professional level prime lens for FX and DX format shooters in a classic focal length
- Optimized for elite performance in low-light shooting scenarios
- Unique 58mm focal length ideal for portraits, landscapes and street photography
- Integrated core NIKKOR technologies
- Pays homage to the original Noct NIKKOR 58mm f/1.2 lens
- Available for \$1,699.95 USD MSRP

New From Nikon

Also announced in October 2013 - The new Nikon D610



Nikon D610 with
AF-S NIKKOR 24-85MM F/3.5-4.5G ED VR Lens

The new [Nikon D610 FX-format](#) camera features a continuous quiet mode, allowing you to shoot sequence shots with a minimum of mirror-slap noise. It should be available in late October with a manufacturer's suggested retail price of \$1999.95 USD for the body only.

Kit configurations for this 24.3-megapixel FX-format (35.9 x 24mm) CMOS sensor camera include:

- With AF-S NIKKOR 24-85MM F/3.5-4.5G ED VR Lens - \$2599.95 USD (MSRP)
- With AF-S NIKKOR 28-300MM F/3.5-5.6G ED VR Lens + 32GB Class 10 memory card + Large Laptop Bag - \$3049.95 USD (MSRP)
- With AF-S NIKKOR 24-85MM F/3.5-4.5G ED VR Lens + AF-S VR ZOOM-NIKKOR 70-300MM F/4.5-5.6G IF-ED Lens + WU-1b Wireless Mobile Adapter + D-SLR Tablet Bag + 32GB Class 10 memory card - \$3249.95 USD (MSRP) You can get full specs and links to sample images at the [USA Nikon D610 Product Page](#).

September 2013: Nikon announced the Nikon 1 AW1, the world's first waterproof and shockproof interchangeable lens camera. This version allows for underwater photograph by snorkeling and scuba enthusiasts.

The new camera is being released with two brand new 1 NIKKOR AW lenses for your underwater photography but for everyday use, the full line of regular 1 NIKKOR lenses are compatible.

Here are the highlights:

Nikon 1 AW1

- World's first waterproof and shockproof interchangeable lens camera
- Waterproof (down to 49 feet - 14 meters), shockproof (up to 6.6 feet - 2 meters) and freezeproof (down to 14° F - 10 Celsius)
- Outdoor friendly features: built-in GPS, altimeter, depth gauge, compass, and underwater controls
- 14.2 MP CX-format CMOS sensor and EXPEED 3A image processing engine, Full 1080p HD Video
- Extremely fast Advanced Hybrid AF system (73-point array) and world's fastest continuous shooting frame rate (15 fps with AF)
- Action Control for easy menu/setting navigation even with gloves on
- Several Creative Shooting Modes including: Easy Panorama, Creative Mode, Advanced Movie Mode, Slow Motion Movies, Best Moment Capture Mode, Smart Photo Selector, Slow View
- Wi-Fi connectivity is achievable when attached to the optional WU-1b Wireless Mobile Adapter
- Compatibility with new 1 NIKKOR AW lenses and expanding lineup of 1 NIKKOR lenses
- Available in October 2013 in black, silver and white



Nikon 1 AW1 with
1 NIKKOR AW 11-27.5mm f/3.5-5.6 Lens



New From Nikon

- One-lens kit (w/ 11-27.5mm lens) will be available for \$799.95 USD (SRP) and a Two-lens kit (w/11-27.5mm and 10mm lenses) will be available for \$999.95 USD (SRP)

1 NIKKOR AW 11-27.5mm f/3.5-5.6 Lens

- Waterproof (down to 49 feet), shockproof (up to 6.6 feet) and freezeproof (down to 14° F)
- Lightweight durable lens with a 2.5x zoom
- Ideal for everyday use, portraits

1 NIKKOR AW 10mm f/2.8 Lens

- Waterproof (down to 49 feet), shockproof (up to 6.6 feet) and freezeproof (down to 14° F)
- Ultra-compact wide-angle fixed lens with a fast f/2.8 aperture
- Ideal for landscapes, or close-up action

Nikon announced three new products in **early September**, including the versatile Advanced Performance COOLPIX P7800 featuring full manual controls and a new electronic viewfinder, the ultra-tiny and stylish COOLPIX S02 and the LD-1000 LED movie light, an optional lighting accessory for Nikon 1 and COOLPIX cameras.

Highlights include:

COOLPIX P7800



- Large 1/1.7-inch , 12.2 MP BSI CMOS sensor for excellent image quality and low light performance
- Fast f/2.0-4.0 glass lens, 7.1x zoom range and VR ensures sharp images
- High-Resolution EVF and versatile 3 in. Vari-angle LCD

help perfectly frame every shot

- Full 1080p HD Video capability with stereo sound
- Fast continuous shooting up to 8fps
- Full manual controls and RAW shooting for advanced shooters
- Sharing via Wi-Fi is possible alongside optional WU-1a Wireless Mobile Adapter
- Available in September 2013 in Black for a suggested retail price (SRP) of \$549.95

COOLPIX S02

- Ultra-small and stylish compact camera ready for every on-the-go moment
- 13.2 MP CMOS sensor and 3x optical zoom
- Full 1080p HD video capabilities
- Highly-responsive 2.7-inch touchscreen display
- Several user-friendly features, scene and creative modes
- Available in September 2013 in Silver, White, Pink and Blue for suggested retail price (SRP) of \$179.95



COOLPIX S02

LD-1000 LED Movie Light

- Lightweight and compact lighting accessory for Nikon 1 and COOLPIX cameras
- Features built-in diffusion panel, enabling even exposure and smooth textures
- Continuous lighting, ideal for shooting video
- Available in October 2013 in Black and White for a suggested retail price (SRP) of \$99.95

August 2013: Nikon announced three new products, including the compact SB-300 Speedlight, the COOLPIX L620 zoom point and shoot, and the versatile AF-S DX NIKKOR 18-140mm f/3.5-5.6G ED VR lens.

SB-300 Speedlight

- Extremely compact yet powerful Speedlight
- Perfect for the photographer who wants to step up their flash photography



New From Nikon

- Gives users an easy way to creatively “bounce” the flash, tilts up to 120 degrees
- Compatible with Nikon D-SLRs and COOLPIX Advanced Performance cameras
- Covers wide-angle 18mm in DX-format
- Powered by two AAA batteries for convenience
- Now available for a suggested retail price (SRP) of \$149.95

COOLPIX L620

- 14x optical zoom helps capture beautiful images and HD video
- User friendly scene and auto modes ensure a fun and successful shooting experience
- 18.1-megapixel CMOS sensor and ISO range up to 3200 ISO
- Strong low-light performance
- Lens-shift VR image stabilization and 1080p HD video with stereo sound
- Runs on AA-batteries
- Now available for a suggested retail price (SRP) of \$249.95



COOLPIX L620

AF-S DX NIKKOR 18-140mm f/3.5-5.6G ED VR



AF-S DX NIKKOR 18-140mm f/3.5-5.6G ED VR

- Versatile 7.8x zoom range offers a practical focal length shooting wide-angle or telephoto
- Offers a practical focal length shooting from wide-angle to telephoto
- Designed for DX-format shooters and capable of capturing beautiful images and HD video
- VR Image Stabilization with four stops of stabilization, helping to ensure sharp photos and video

- Features a Silent Wave Motor, two focus modes
- Now available for a suggested retail price (SRP) of \$599.95

Nikonians®
has been steadily moving forward in keeping
pace with our ever evolving technology!

Have you seen our Apps in iTunes?

**DOF Calculator, mGallery, PhotoProShop,
Podcasts, and more!**

Be on the go, and in the now!

Keep up-to-date with news, forums, eZines, gallery posts
and of course, your purchases with the Photo Pro Shop, or simply
shop-'tip-you-drop! Simply visit iTunes and type in Nikonians,
and see the full list available for iPhone and iPads.





Brad MacDowell (Laserdoc), made this misty image of Nikonians Academy Director Mike Hagen (Mike_Hagen), scouting for a composition at sunrise in Watson Lake, on the last day of ANPAT 13. Nikon D800, lens @ 78mm, f/11, 1/320 sec, ISO 100