Jim Zuckerman's

Back issues

# PHOTO INSIGHTS







and I agree. In fact, in 2019 I printed a book titled, *The First Fifty Years*, in which I shared my work beginning in 1969 with my family. It consisted of only full page photos and brief captions like "Havasu Falls, Arizona. 1987" and "Iridescent ocean bubbles on a black sand beach, South Island, New Zealand. 1981". Many photographers like to crowd multiple images on a page to include as many as possible, but in my opionion this reduces the impact of each image. A single large image is a lot more impressive than too many pictures squeezed on a page.

There are many online companies that print custom books: Shutterfly, Blurb, Bookbaby, and Lulu Press are examples. I used Shutterfly, and the color of my images, the quality of the leather binding, and the superior paper exceeded my expections.

A custom printed book like this is not cheap, especially since I opted for the leather bound style, but given the nature of what I was passing along to future generations of my family, I felt it was worth the expense. You can add as many pages as you want, but of course the price goes up accordingly. Companies like Shutterfly are always having sales with coupon discounts, and I took advantage of that and paid about \$270 or so for 84 pages. This included the leather binding as well as the 'layflat pages' feature which is essential in my opinion. Inexpensive books are bound in such a way that, when opened,t they won't lay flat on a flat surface.

If I live another 50 years, I guess I'll have to print another book. Or maybe I'll do it again in 2029.

Jim Zuckerman photos@jimzuckerman.com www.jimzuckerman.com

# **FRAMING**

sing a foreground element to frame a subject or scene in the background is a technique artists have used for centuries. In Photography, framing the important parts of a picture to help focus attention on them is still a useful aspect of composition.

A good example of this is seen below in a shot from the ancient Roman ruins at Ephesus in Turkey. I used a 100mm telephoto lens to compose this image, and notice one important factor: Both the foreground arch and the background facade are sharp. That's the only reason why this photograph works. Had the

stone frame been out of focus, which you'd expect from using even a medium telephoto lens, the image would have been seriously degraded. I'd consider the image a failure.

To this point, study the pair of images on the next page. This is a castle on the Rhine River in Germany. The shot on the left shows what so many photographers do -- they render the foreground framing element out of focus while the distant subject is sharp. That just doesn't look good. The soft leaves at the top of the frame are visually distracting. We photograph nature and great architecture because we ap-







preciate the beauty and detail. Throwing some of it out of focus doesn't make sense.

The comparison picture on the right shows the needed correction. The framing element is now sharp like the background as it should be.

I appreciate art is in the eye of the beholder. Some photographers still insist on blurring foregrounds just like some art museums think throwing a bucket of paint on a canvas is great art. I would call those photographers misguided and the museum curators idiots. But that's just my opinion.

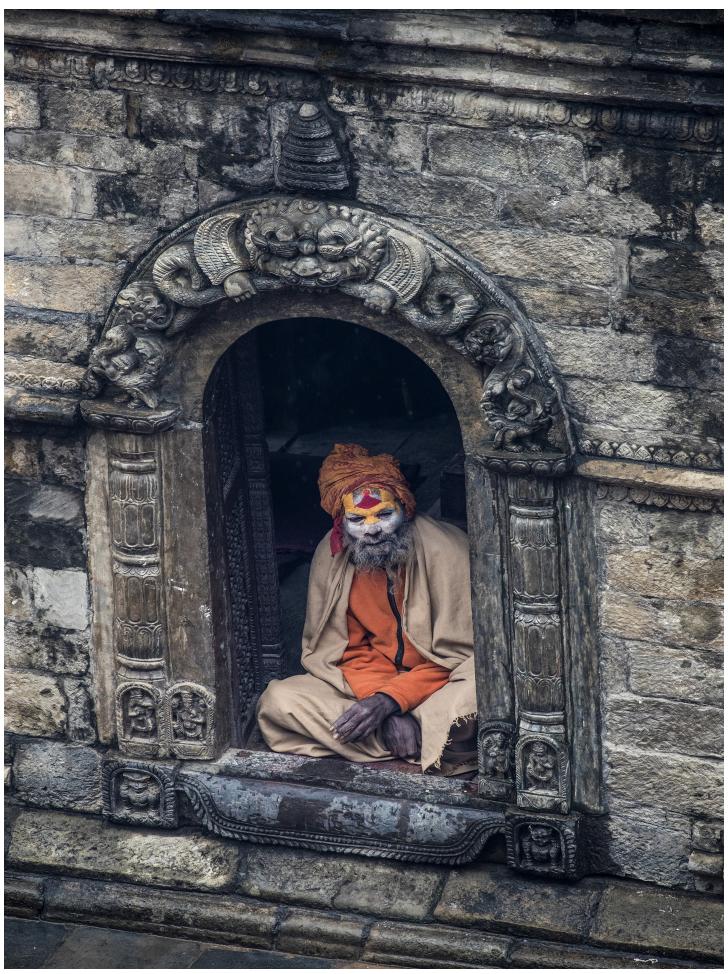
#### Holding focus throughout with long lenses

Maintaining focus throughout an image where framing is involved is obviously a challenge when using a telephoto lens. The longer the lens, the greater the challenge. There are three ways to handle this so both foreground and background are sharp.

### 1) Use the smallest aperture on the lens

This often solves the problem, but in many different kinds of photographic situations it's not enough to hold focus over the entire picture area. If the lens is long, and/or if the shooting position is close to the foreground, then a small aperture won't be enough.

In a photograph like the one of a holy man in Nepal on the next page, both the frame and the subject are essentially on the same plane. I was shooting from about 80 feet away, so, in this case, any lens aperture would have pro-



# The Birds of Costa Rica

May 13 - 23, 2024





duced a picture with everything sharp. By contrast, the photographs on pages 4 and 5 had to be treated differently.

#### 2) Set up a Photoshop composite

If a small aperture is not enough to produce complete depth of field, you can take two separate pictures in which you focus on one element, shoot, and then refocus on the second element and shoot again. Now you have the two areas of the composition sharp, and they can now be composited together in Photoshop. That's what I did in the picture of the Roman ruins on page 4 and the beach picture at right.

#### 3) Use focus stacking

The third option is focus stacking. Many cameras now have this feature built into them but,



if yours doesn't, you can do it manually. Mount the camera on a tripod and then, once the shot is composed, take a series of pictures in which you focus sequentially throughout the frame, from the immediate foreground to the distant background. In Photoshop, you can assemble all these frames into a composite with complete DOF. The image of an ice cave, below, is an example of how great this technique works. §



# SIDELIGHTING

ne of the most dramatic and effective types of light photographers use is side lighting. I decided to write an article on this topic because I recently posted on Facebook the photo below of a 150 million year old dragonfly fossil. The best way to make the very shallow and delicate imprint of the insect on the rock prominently seen and clearly defined was to use side lighting. When light skims across a flat surface, even the tiniest depressions in the rock become shadows and the high points of the surface, even minute rises above the flat

surface, catch the light andt become highlights. It is the contrast between those tiny shadows and highlights that make texture, and it's the textural contrast that makes the delicate wing impressions clearly visible.

Side lighting dramatizes many different kinds of images. One of my favorite applications is portraiture, whether indoor or outdoors and whether human or animal. Look at the two images on the next page. For the black and white self-portrait taken in 1970, I used a single photo flood (consisting of a \$10 reflector and an or-

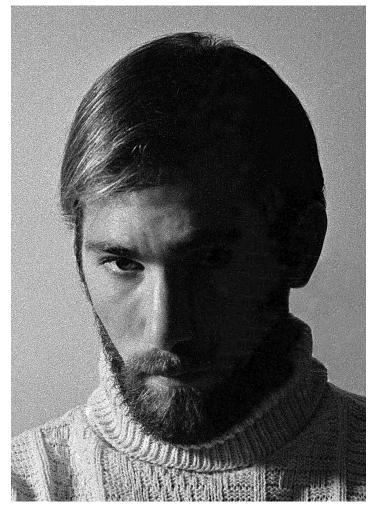


dinary light bulb) clamped to the back of a chair and positioned to the side, i.e. 90 degrees to the lens axis.

For the portrait of the leopard in South Africa, I took advantage of the light coming from the same angle as in the self-portrait. In both instances, the faces are bifurcated by the light. Whether or not the shadow portion of the face has detail depends on the intensity of the light, the exposure, whether or not there is any kind of fill light used, and the way in which the image was post-processed. In 1970, post-processing meant how a print was manipulated in the dark-room.

In landscape photography, side lighting occurs when the sun is close to the horizon and the light skims the ground. The golden light at this time of day is beautiful, as we all know, but at the same time the pronounced texture from the low angled sunlight makes every element in the scene stand out. The landforms and every natural element like grass, bushes, and rock surfaces seem to have exceptional depth.

In the photograph of the Alabama Hills and Mt. Whitney in California on the next page, warm toned light grazed the landscape a couple of minutes after sunrise and it illuminated the face of the arch beautifully. Notice how the side lighting brings out the texture of the sandstone. It's not just the beautiful golden light that makes sunrise and sunset such great times to take outdoor pictures, and specifically landscapes. It's the enhanced texture, long shadows, and relatively low contrast that makes these times of day worth shooting because invariably you can take amazing shots.









#### Flash

Side lighting from the sun is obviously dependent on the weather and how the subject or scene is situated relative to the direction of the light. Using a flash, on the other hand, can give you side lighting whenever you want it.

For the costumed model in Venice, Italy, left, I used off-camera flash at dawn to add drama to a subject that was already dramatic. My arm wasn't long enough to hold the flash at the appropriate angle and the best distance to the subject, so I asked someone to hold it for me in what I thought was the best position. If no one is around, I rest the flash on my camera backpack at an upward angle. I fired the portable strobe unit by remote trigger, and studying the LCD screen on the back of the camera allowed me to check the exposure and the way the light was illuminating the subject. Notice that both the model and the background are exposed correctly. I explain how to do this in the next article. §

# Ethiopia Photo Tour Jan, 21 - Feb. 3, 2025





# how to expose for Off Camera Flash

any photographers are intimidated by flash, and this is especially true with using the flash off-camera. The insecurity is really all about exposure. The reason exposure with off-camera flash is not straightforward is because there are actually two separate exposure calculations that have to be made.

Take, for example, the photo below. I shot this at dawn in San Marco Square in Venice, Italy, during my annual photo workshop in the

midst of carnival. The exposure on the costumed models is entirely related to the flash. That exposure is a function of 1) the flash-subjects distance, 2) the f/stop, 3) the ISO and 4) the power of the flash. The exposure for the background had nothing to do with the flash because the light from the flash didn't reach that far; thus it didn't influence how light or dark the background architecture appeared.

The exposure on the background was a func-



tion of 1) the ambient light, 2) the f/stop and 3) 1/60th of a second (assuming no tripod use). the ISO.

Notice two things here: First, there are two separate exposures which need to be calculated -- one exposure for the flash and the other exposure for the ambient light. Second, of the factors that determine the exposure, two of them overlap, i.e., relevant to both exposure calculations. They are *ISO* and *f/stop*.

This means the ISO and the f/stop should be the same for determining both exposure scenarios.

#### Here is the procedure:

1. Take an exposure reading on the background using aperture priority mode. Make sure the shutter speed is fast enough to produce a sharp picture. You will have to raise the ISO and adjust the lens aperture until the shutter is at least

For the image below, for example, I was shooting at dawn again, and I had to raise the ISO to 2000 and the lens aperture to f/5.6 (with a 24-105mm lens) in order to get a shutter speed of 1/60th of a second. [NOTE: The speed of the shutter can't be faster than the sync speed which is usually 1/250th of a second].

- 2. Take a test shot of the background without flash to make sure that's the exposure you want. Make a note of the ISO and the lens aperture you've used.
- 3. Position the flash -- or ask a friend to hold it for you -- in the desired angle and at the desired distance relative to the subject. For the photo below, I didn't have anyone to hold my flash so I simply put my camera backpack on the ground in front of the model and angled



the flash on top of the pack to provide the angle of illumination I wanted. You can see that the bottom of the purple dress is a little lighter than the model's upper body because the flash was closer to the hem. This discrepancy of illumination can easily be addressed using the burn and dodge tools in Photoshop. If you are working in an environment in which you can use a tripod or a light stand to hold the flash, that solves the issue of uneven lighting.

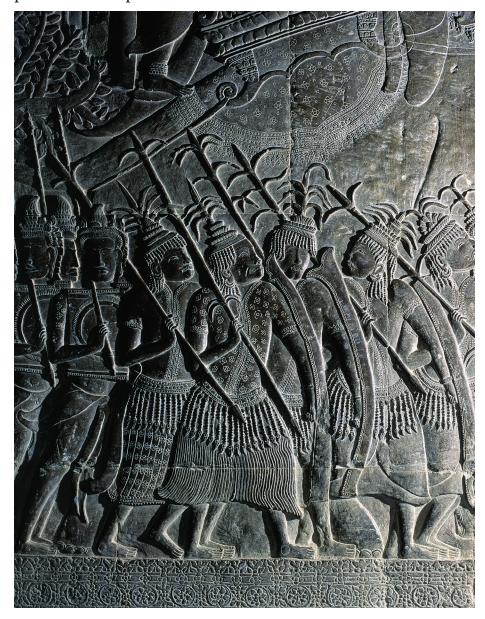
Set the exposure mode on the flash to eTTL (or iTTL), and set the camera on the same ISO and f/stop you used for the background exposure. Take a test shot with the flash. The flash will detect the lens aperture you're using.

4. Examine the results on the LCD screen on the back of the camera. If the light on the subject from the flash is overexposed or underexposed, use the *flash exposure compensation* feature built into the flash. This is *not* the exposure compensation feature built into the camera. You can tweak the flash exposure in 1/3 f/stop increments. With the immediate feedback on the LCD, you can tweak the ratio of light from the flash versus the background.

#### Another scenario

The picture below presents a very different scenario when using off-camera flash. This is a stone relief carving at Angkor Wat in Cambodia. It is located under a large overhang and, therefore, was in deep shadow. Had I used no flash at all, the relief would have appeared flat, dimensionless, and the exquisite anient carvings would have seemed unimpressive. The flat, garish light from on-camera flash would have been worse.

Therefore, I took the flash off-camera and held it to the side. I actually pressed the flash unit up against the stonework to create the most severe angle possible. Since there was no background, I only had one flash exposure to consider. Using the LCD screen and the flash exposure compensation feature on the flash, I took this shot at f/16 and made sure the back of the camera, i.e., the plane of the digital sensor, was as parallel as possible to the plane of the relief for maximum DOF. §



# PATAGONIA PHOTO TOUR

October 15 - 26, 2024





# Photography Quiz

- 1. A pin hole camera uses a tiny lens to form an image on the back of the camera.
  - a. True
  - b. False
- 2. The complimentary color of red is:
  - a. Blue
  - b. Cyan
  - c. Green
  - 4. Yellow
- 3. The photographic term that explains how much detail is captured in the highlights and shadows is:
  - a. Exposure triangle
  - b. Aspect ratio
  - c. Ambient light
  - d. High dynamic range
- 4. Neutral density filters not only reduce exposure but they also make images more bluish.
  - a. True
  - b. False
- 5. From f/45 to f/90 is:
  - a. One full f/stop
  - b. One and a half f/stops
  - c. One and a third f/stops
  - d. Two full f/stops
- 6. Contrast gain in a digital file is a problem because:
  - a. Detail lost in the highlights may be unrecoverable
  - b. Detail lost in the shadows may be unrecoverable
  - c. Both A & B are true
  - d. Neither A & B are true
- 7. When shooting in winter conditions, you should always use a lens hood because:
  - a. Falling snow can freeze on the lens
  - b. Wind-blown snow can freeze on the lens
  - c. A low angled sun can cause lens flare
  - d. All of the above
  - e. None of the above
- 8. It's a good idea to use a tripod when shooting from a boat.
  - a. True
  - b. False
- 9. A 1.4x teleconverter causes:
  - a. One f/stop light loss
  - b. Two f/stops light loss
  - c. 1 1/3 f/stop light loss
  - d. None of the above
- 10. A synonym of 'bokeh' is:
  - a. Sharp
  - b. Blurry
  - c. Lens flare
  - d. Blown out

### **UPCOMING PHOTO WORKSHOPS**



### Winter Wildlife Workshop

Photograph beautiful North American mammals plus a snow leopard in natural environments. Mountain lions, red foxes, arctic foxes, bobcats, lynx, wolves and more are in their full winter coats. This is a very special workshop.

January 6- 10, 2024



### Snowy Owl Workshop

Close up encounters with these beautiful birds of the North. Capture bird in flight shots in a snowy environment. Jim guides you in camera settings and technique to take the best pictures possible.

January 11 - 15, 2024



### Carnival in Venice

Photograph amazing costumes in a Medieval environment, inside a 16th century palace and in an iconic gondola. The photography as well as the experience is amazing.

February 4 - 10, 2024

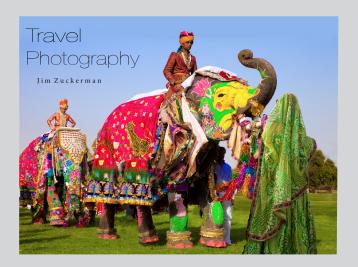
### Expand your photographic artistry with

### eBooks

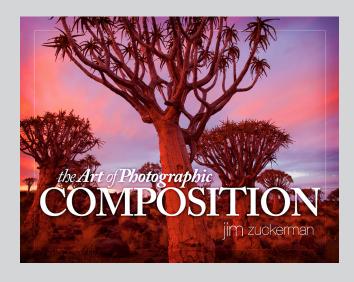
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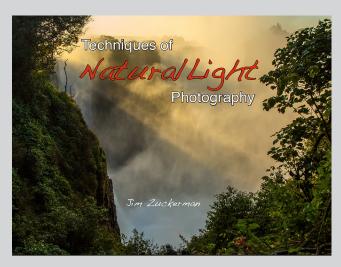




### eBooks continued

Click on any ebook to see inside













# ONLINE AI COURSE

# Blow your mind with how creative you can really be!

Starts March 2, 2024





### What's wrong with this picture?



iguring out what's wrong with this picture very difficult. The two people walking behind the subject are obviously distracting and need to be eliminated. I took this picture several years ago before *generative fill* was part of Photoshop, and I used the close tool quite successfully to remove the two men in the background.

What is particularly challenging, however, is the piece of wood in the immediate foreground. It is covering most of the woman's left foot. In the first corrective version I was able to remove the wood, but rebuilding the foot was very hard and I did a poor job. The only thing I could do was take the right foot and reverse it, but the angle was wrong.

Look at the new corrected version on the next page. Using the new AI command, generative fill command(Edit > generative fill), I was able to eliminate



the men in the background easily, and this was followed by removing the wood and essentially reforming the woman's left foot.

Notice what the Photoshop software was able to do. It formed the woman's toes and rebuilt her sandal including the strap that covers her toes and the top part of her foot. Never before have we had such a powerful editing tool for making photographs perfect.

[Note that when you use the generative fill command, it is grayed out until you make a selection. The selection showing the 'marching ants' can be made with the lasso tool, as I did with this photo, the rectangular marquee tool, the magic wand tool, etc. Then and only then is the generative fill command available to apply to the image.] §

### SHORT AND SWEET

1. When I travel, I am always looking for backgrounds in front of which I can photograph local people. A doorway, a window, a castle, a landscape -- backgrounds can make or break photographs. I photographed these costumed boys in the Philippines in the shallows on Borocay Island..



2. With multiple subjects like this family of lions in Kenya, I feel it's important to render all of them in focus if possible It's not easy, especially when using a telephoto lens with its inherent shallow depth of field. For this image, I waited until all four cats were essentially on the same plane before I started shooting.



3. Dominant foregrounds are created by placing a wide angle lens very close to the element near the camera. The foreground will be disproportionately large compared to the background. A small lens aperture is essential to maintain complete depth of field. This is a photo from County Mayo, Ireland.



4. Having a large number of clouds in your photo library comes in handy when you are looking for dynamic sky backgrounds. I shot these clouds from an airline on a commercial flight. Storm clouds, white puffy clouds on a blue sky, rainbows, sunrises and sunsets -- they all come in handy when being creative. §



# Coast of France and the Loire Valley

April 4-13, 2024



### **ASK JIM**

Every month, Jim answers a question from his online students, from people who participate in his tours and workshops, or from subscribers to this magazine. If you have a question you'd like Jim to answer, please drop him a note at photos@jimzuckerman.com.

Q: Jim...I keep reading about the problem of diffraction when using small lens apertures. If I want depth of field, I need to close down to a small lens aperture. However, if that's going to make my photographs unsharp, what's the point? Andrew Milikin, Oak Park, Michigan

A: If you want depth of field in a photograph, you simply have to accept the loss of a certain amount of sharpness. Diffraction occurs mostly at f/16 and smaller apertures. The only way around this vexing problem is to do focus stacking, but with many subjects that move, like the Eurasian lynx below, this isn't possible. Using a small aperture for increased depth of field and, at the same time, with increased degradation of image quality is one of the many compromises we have to make in photography. §



### **Partial List of Photography Tours** 2024

WINTER WILDLIFE Jan 2024



ABANDONED in GEORGIA March 2024



**HOLLAND & BELGIUM** 

**SNOWY OWLS** 

Jan 2024



Apr/May 2024



CARNIVAL in VENICE

Feb. 2024

WHITE HORSES, FRANCE May 2024



**COSTA RICA BIRDS** May 2024



LAVENDER FIELDS, FRANCE Jul 2024



**INDONESIA** Jul/Aug 2024



**ICELAND DRONE TOUR** Aug/Sept 2024



**PATAGONIA** Oct 2024



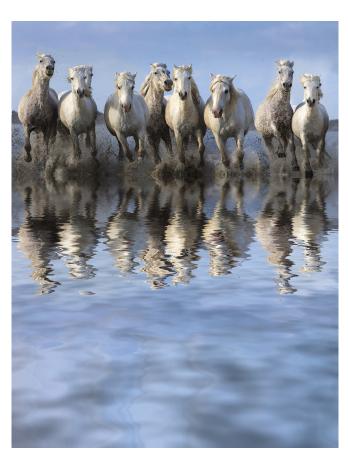
LOUISIANA SWAMPS Oct 2024





# White Horses of the Camargue

May 6 - 11, 2024







# **Student Showcase**

Each month, Jim features one student who took beautiful and inspiring images on one or more of his photography tours or workshops. It's really fascinating how photographers see and compose such different images even though we may go to the same places. Everyone takes great photographs on Jim's trips.

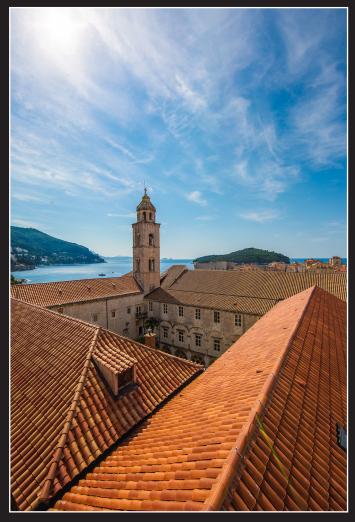
**Alan Hart, Racine, Wisconsin** American Southwest photo tour, New Mexico photo tour, Balkans photo tour

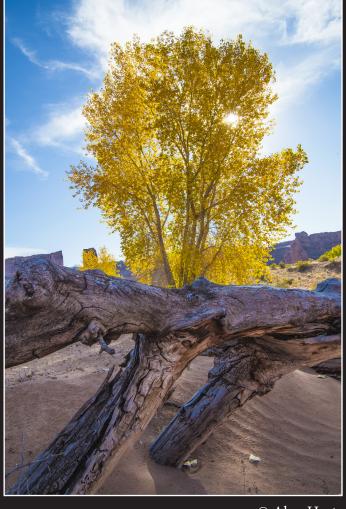




© Alan Hart

# Student Showcase, continued





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# Student Showcase, continued





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# Student Showcase, continued





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# Indonesia Photo Tour

### July 31 - August 12, 2024



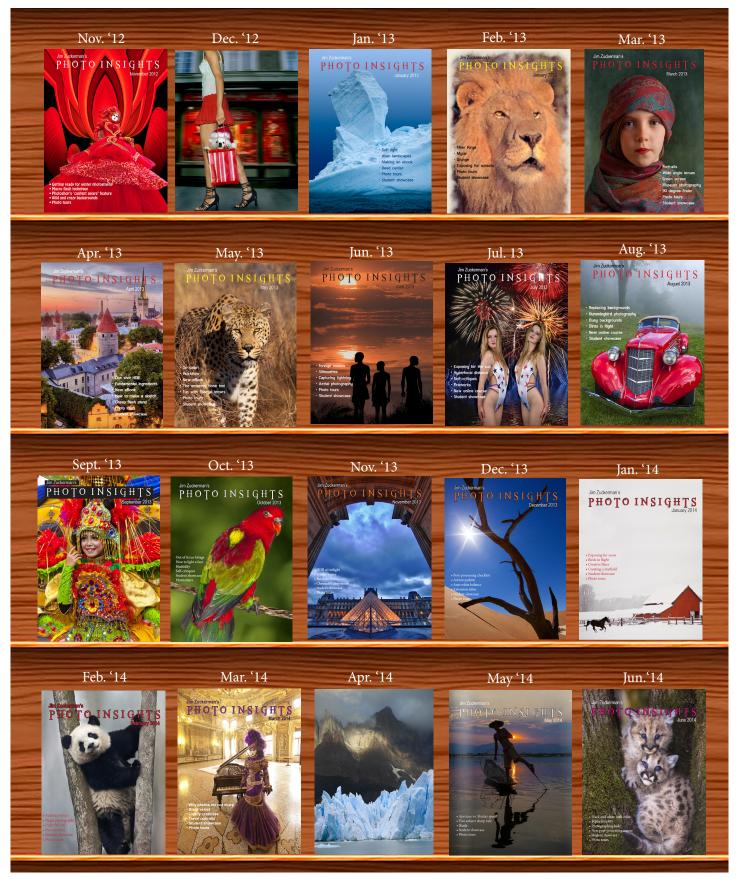


# HOLLAND & BELGIUM

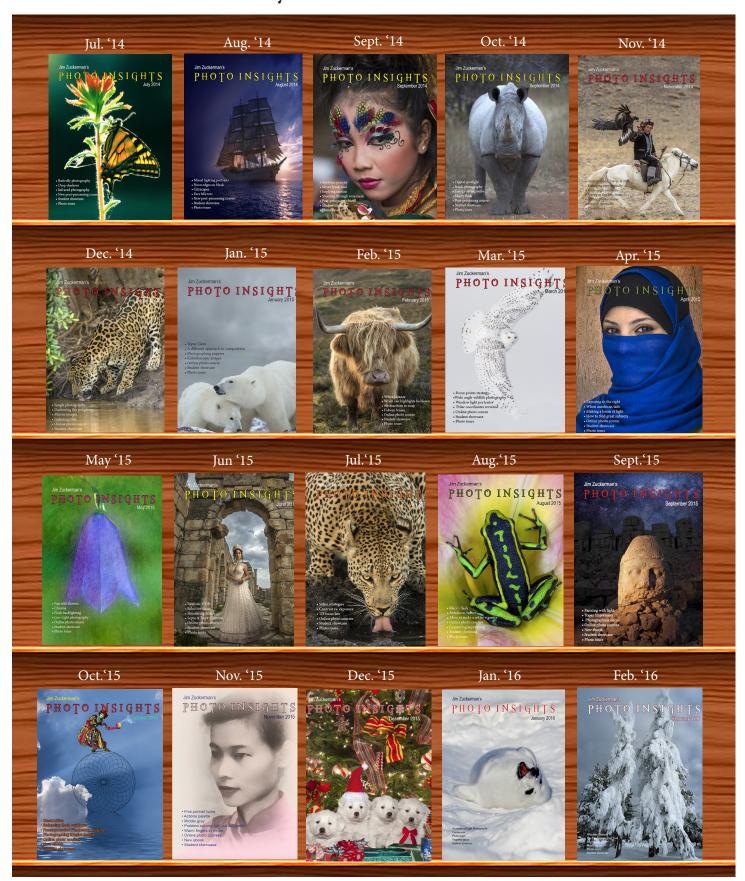
## April 24 to May 2, 2024



### PHOTO INSIGHTS



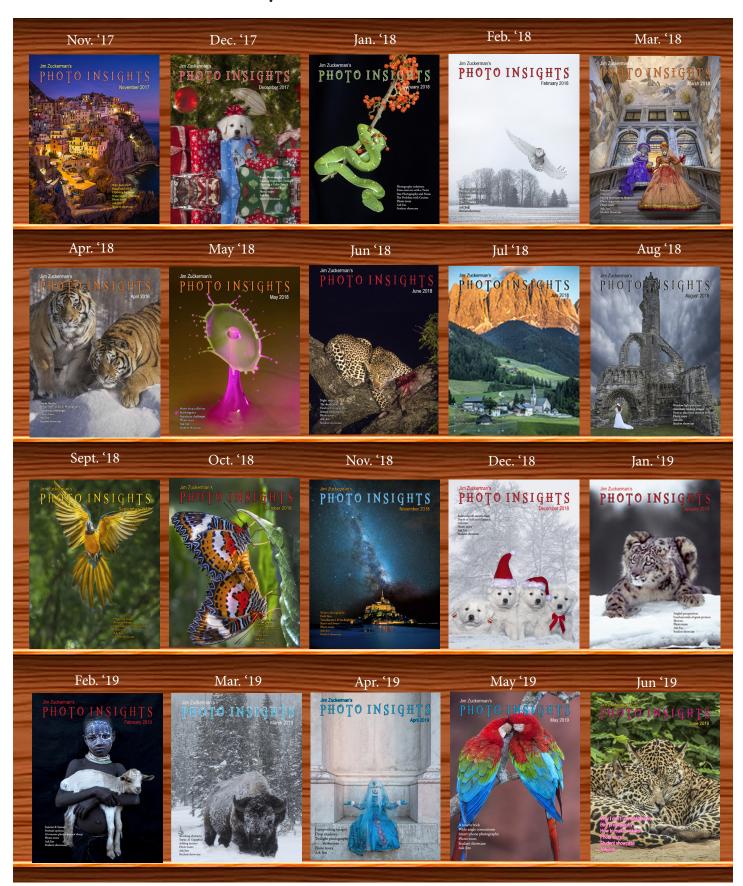
### PHOTO INSIGHTS



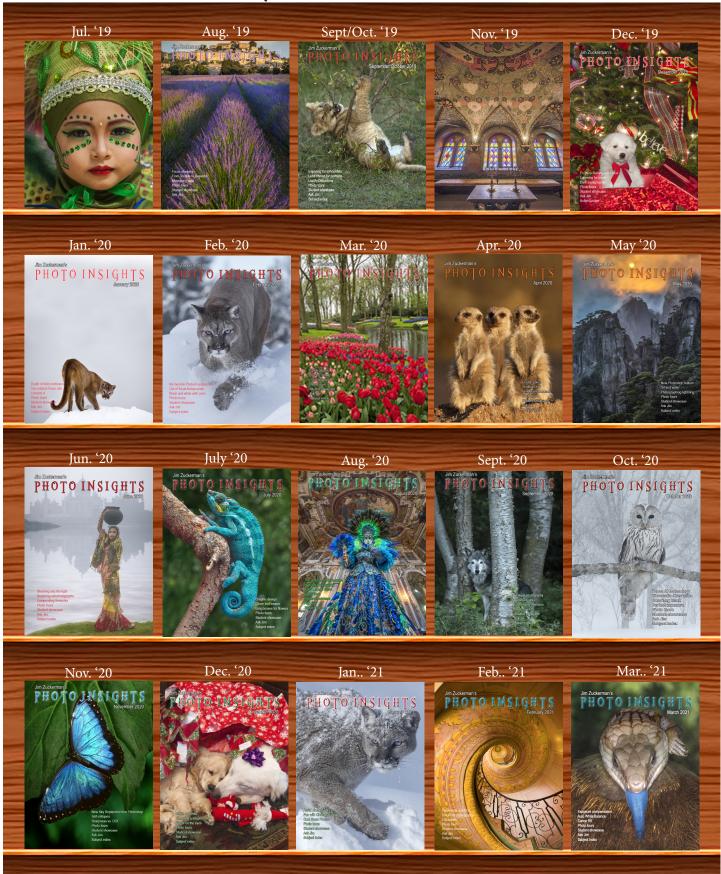
### PHOTO INSIGHTS



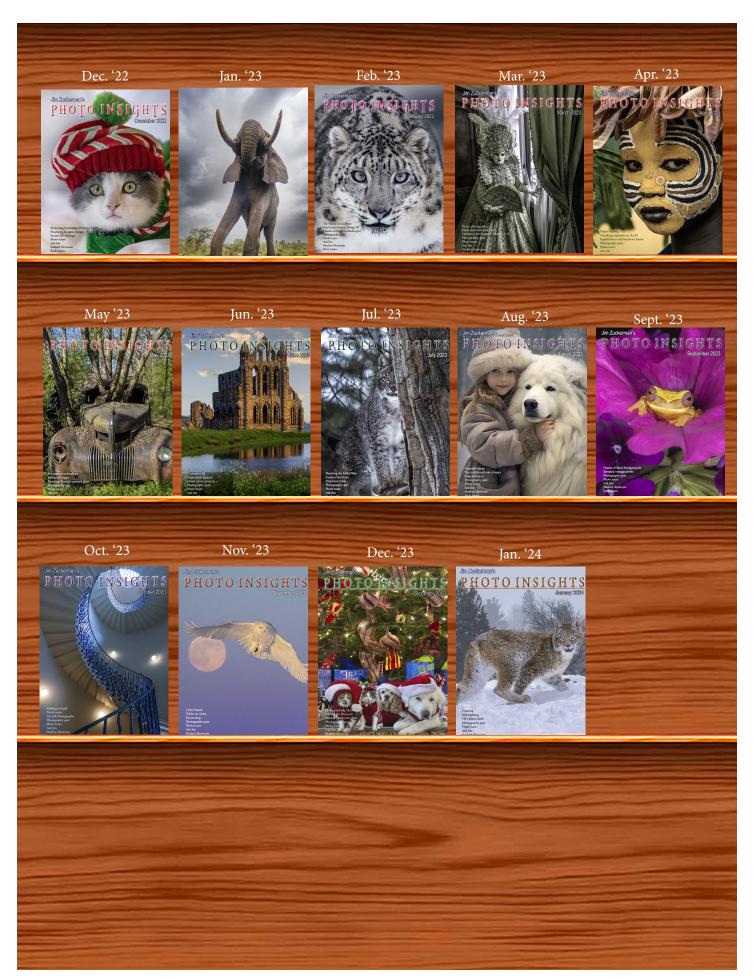
### PHOTO INSIGHTS



### PHOTO INSIGHTS







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1/3 focus law	Jul. '15		Cityscapes	Aug. '14
3D sphere	Mar. '16		Cityscapes	May '16
90 degree finder	Mar. '13		Clone tool, fixing an issue	Sep. '17
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			Compositing, 7 steps	Jan. 22
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	-		Creating a Sketch	Dec. '17
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butterny photography	jui. 14			*
			Exposure compensation	Mar. '21
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Chromatic aberration	May '13		Fisheye lenses	Feb. '15
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Fun With Christmas Lights	Jan. '21	
Fun with Food		
Graphic Design	Jul. '20	
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Grunge technique	Feb. '13	
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HDR, realistic	Jun. '15	
HDR, hand held	Dec. '16	
HDR, hand held	Nov '17	
HDR, hand held	Jul. '18	
HDR panoramas	Jun. '16	
HDR, choosing the number of frames	Jun. '22	
High wind	Apr. '17	
Highlights	Apr. '14	
Highlights, overexposed	Feb. '15	
Histograms, Why I Don't Use	Jun '19	
Histogram problems	Apr. '20	
Home nature projects Hotels with a view	Jun. '23 Mar. '20	
	Oct. '13	
Humidity Hummingbird photography	Apr. '13	
Hyperfocal distance	Jul. '13	
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Image resizing	Aug. '18	
Implying motion	Sept. 14	
Impossible DOF	Feb. '16	
Impossible DOF	Jan. '17	
Indestructible camera bag	Dec. '14	

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Infrared photography	Jul. '14
Insane ISO settings	Dec. '22
Interiors	Oct. '15
iPad: Loading photos	Aug.'17
iPhone photography, pros and cons	Apr. '22
Jungle photography	Dec. '14
Kaleidoscopic images	Jan. '15
Kaleidoscopis images	Aug. '20
Keystoning	Nov. '23t
Keystoning, correcting	Aug. '15
L Bracket	Eab '19
L Bracket L Bracket	Feb. '18 Feb. '21
Landscape photography	Dec. '12
Landscape photography  Landscape photography	Apr. '14
Landscape photography	Nov. '16
Layer Masks, The Power of	Feb. '22
Light fall-off	Feb. '14
Light painting	Dec. '21
Lighting a face	Oct. '13
Lightning photography	May '20
Liquify	Feb. '18
Liquify Distortions	Sept/Oct. '19
Lenses, Essential	Aug. '23
Long lens portraits	Oct. '18
Long Lenses for Flowers	Jul. '20
Low light photography	May '15
Luminar 4	Jan. '20
Macro flash	Nov. '12
Macro flash	Sep. '14
Macro flash	Aug. '15
Macro flash	Aug. '22
Macro photography and DOF	Feb. '22
Macro trick	May '19
Managing soft focus	Jul. '21
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Meters, How They Work	Jul. '18
Meters, when they fail	Dec. '16
Metering situations, Impossible	Jul. '19
Miller Way Shooting that	Nov. '15
Milky Way, Shooting thet Minimizing dust on the sensor	Nov. '21
Mirrors	Jan. '19
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Moon glow	Oct. '16
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Mundane to Ideal	Nov. '19
Museum photography	Mar. '13
Natural Light Portraits	Aug. '21
Negative space	Jan. '16
Neon edges on black	Aug. '14
Neutral Density filters	Jun. '18
Neutral Density filters and water	Mar. '22
Night Safaria	Feb. '14
Night Safaris Night to Twilight	Jun. '18 Dec. '17
Night to Twilight Noise reduction	Feb. '17
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Oil and water	May '20
Off-camera flash	Jan. '24

Organization of photos	Mar. '18
Out of focus foregrounds	Jan. '20
Paint abstracts	May '13
Paint abstracts	Aug. '21
Painting with light	Sep. '15
Panning motion	Dec. '16
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Parallelism and DOF	Feb. '21
Perspective, Super Exaggeration of	Dec. '21
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Photo terms	Nov. '22
Photographing Christmas	Dec. '23
Photography to Art	Dec. '17
Photography solutions	Jan. '18
Photoshop, content Aware	Nov. '12
Photoshop, sketch technique	Apr. '13
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Photoshop, replace background	
Photoshop, actions palette	Dec. '13
Photoshop, layer masks	Feb. '13
Photoshop, the clone tool	May '13
Photoshop, soft foliage	Oct. '13
Photoshop, mixer brush tool	Sept. '14
Photoshop, b & w with color	Jun. '14
Photoshop, drop shadows	Jul. '14
Photoshop, creating texture	Feb. '14
Photoshop, face mirrors	Feb. '14
Photoshop, liquify	Mar. '14
Photoshop, face mirrors	Aug. '14
Photoshop, digital spotlight	Sep. '14
Photoshop, enlarge eyes	Nov. '14
Photoshop, darken the periphery	Dec. '14
Photoshop, mirror images	Dec. '14
Photoshop, beam of light	Apr. '15
Photoshop, polar coordinates	Mar. '15
Photoshop, chrome	May '15
Photoshop, actions palette	Nov. '15
Photoshop, cut and paste	Nov. '15
Photoshop, geometrics	Oct. '15
Photoshop, plugins	Oct. '15
Photoshop, multiple selections	Apr. '16
Photoshop, sharpening	Apr. '16
Photoshop, Flood plugin	Apr. '16
Photoshop, Desaturation	Aug. '16
Photoshop, making a composite	Aug. '16
Photoshop new tool	May '20
Photoshop, place one element behind	Aug. '18
Photoshop, the pen tool	Feb. '16
Photoshop, canvas size	Jan. '16
Photoshop, using the earth	Jun. '16
Photoshop, define patterns	May '16
Photoshop, paste into	Nov. '16
Photoshop, b & w with color	Feb. '17
Photoshop, open a closed door	Apr. '17
Photoshop, palettes	May '17
Photoshop, My favorite plugins	Jan. '20
Portrait options	Jan. '19
Portrait techniques	Nov. '15
Portraits	Mar. '13
Portraits, mixed lighting	Aug. '14
Portrait Professional	Nov. '19

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Portraits, Lens choice	Sept/Oct. '19
Portraits, side lighting	Sep. '17
Portraits, window light	Mar. '15
Portraits, outdoors	May '17
Post-processing checklist	Dec. '13
Post-processing: Contrast	Aug. '17
Practicing graphic design, Part I	Dec. '22
Practicing graphic design, Park II	Jan. '23
Practicing graphic design, Part III	Feb. '23
Pre-capturing technology Predictive Focus	May '23
Problem/solution	Sep. '18
	Apr. '17
Problem Solving in Photoshop Problem with cruises	May '22 Jan. '18
Protecting extremeities from the cold	Dec. '22
Protecting highlights	Dec. '12
Puppies	Jan. '15
Puppy photography	Feb. '18
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Reflections	Feb. '13
Reshaping faces	Oct. '22
Restoring old photos	Jun '20
Ring flash, advantages	Jul. '21
Ring flash versatility	Oct. '21
Rule of Odds	May '22
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Safari	May '13
Safari strategies	Jul. '15
Seeing as the lens does	Nov. '14
Seeking Cool Snow Photos	Jan. '21
Selective filtering	Mar. '18
Selective focus	Jun. '15
Self-critiques	Jul. '13
Self-critiques	Oct. '13 Nov. '20
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Sensor cleaning Sepia and dark contrast	Jun. '18 Jun. '15
Sepia, Traditional look of	Juli. 15
Shade	May '14
Shady side	Jun. '18
Shadows define the shot	Dec. '23
Shadows, Paying Attention to	Mar. '18
Sharpness problems	Mar. '14
Shooting in Inclement Weather	Nov. '22
Shooting through textured glass	May '23
Shooting through wire mesh	Sept. '14
Shooting into the light	Jun '20
Side lighting	Jan. '24
Silhouettes	Jun. '13
Silhouettes, How to make	Apr. '22
Silhouettes, Exposing for	Sept/Oct. '19
Silvered landscapes	Mar. '20
Sketch, How to Make	Jun '19
Skies make or break a picture	Aug. '21
Sky replacement	Nov. '20
Sky replacement strategies	Aug. '22
Snow exposure	Nov '17
Snow exposure	Nov. '19
Soap abstracts	Aug. '23
Soft light	Jan. '13
Smart phone photography	May '19
Stained glass Star photography	Mar. '17
Star photography	Jul. '16

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Star photography and noise	Jan. '18
Stock photography	Sep. '14
Sunrise & sunset	Jan. '19
Tamron 150-600mm	Apr. '14
Ten reasons photos are not sharp	Jan. '19
Texture, Adding	Mar '19
Texture Mapping in 3D	Jul. '21
Topaz AI Gigapixel	Mar '19
Topaz glow	Jan. '15
Topaz glow	Sep. '17
Topaz Impression	Sep. '15
Topaz Remask 5	Oct. '17
Topaz Simplify 4	Dec. '12
Topaz simplify 4	Jun. '14
Topaz Studio	Apr. '18
Translucency & backlighting	Nov. '18
Travel photography	Feb. '13
Travel portraits	Mar. '14
Travel tips	Apr. '14
Travel photographer's guide	Jun. '17
Tweaking exposure on the fly	Apr. '23
Twilight photography in the rain	Apr. '19
Twilight, Creating	Oct. '23
Tripods	Mar. '18
Two subject sharp rule	May '14
Two subject focus rule	Jan. '20
Two subject focus rule	Jun. '21
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Urban heights	Jun. '21
Ultra distortion	May '18
Unusual Panos	Nov. '22w
Upside Down Reflections	Aug. '21
Warm fingers in winter	Nov. '15
Water drop collisions	May '18
What NOT to do in photography	Apr. '18
When You Needed a Zoom	Aug. '21
White on White	Dec. '20
White on White	Nov. '23
White vignette	Aug. '15
White balance	Feb. '15
White balance, custom	Mar. '16
White balance, What	Jun. '23
Wide angle conundrum	May '19
Wide angle lenses	Mar. '13
Wide angle portraits	Nov. '14
Wide angle lenses	Jun. '17
Wide angle lenses: Outside the Box	Jun. '22w
Wide angle keystoning	Nov '17
Wildlife photos with wide angles	Mar. '15
Window light	Dec. '15
Window light portraits	Aug. '18
Window frames	Feb. '16
Winter photography	Dec. '12
Winter bones	May '13
Winter photography	Dec. '15
Winter photography	Nov. '18
Wire Mesh, Shooting Through	Jul. '18
Workflow	May '13

# Quiz answers

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#### Your score

**90% - 100%:** You could have been a pro

**80% - 89%:** Your glasses probably need a new prescription

70% - 79%: Just don't quit your day job

< 70%: You should really be using an iPhone

