Jim Zuckerman's

PHOTO INSIGHTS

April 2024

Simulating B & W infrared
6 Reasons photos are not sharp
Addressing the problem of harsh light
Photography quiz
Photo tours
Ask Jim
Student Showcase
Back issues

Table of Contents

4. Simulating B & W infrared
8. 6 reasons your photos are not sharp
14. Addressing the problem of harsh light
17. Photography quiz
19. Jim's eBooks
22. What's wrong with this picture?
25. Short and sweet
27. Ask Jim
28 Photography tours
30. Student Showcase
36. Past issues
43. Subject index

On the cover: A male cardinal allowing an unusually close approach taken from ground level with a wide angle lens. ***This page:*** The ruins of a 19th century grist mill photographed during Jim's Abandoned in Georgia photo tour.

On my recent photo tour, "Abandoned in Georgia," upon first seeing an abandoned plantation mansion as we parked in front of it, a woma commented that the photo of mine she' had seen on my website made it look better than it was in reality. I'm not certain this was a compliment. Rather, I feel she was disappointed that the actual structure wasn't as impressive as she had imagined.

But isn't that what we photographers do? Make things, and people, look better than they are in reality? Fashion models wear gobs of makeup because without it, most of them are quite plain. Makeup, and professional lighting, makes them look a lot better. In photographing landscapes, architecture, wildlife, and pretty much everything else, we tweak contrast, add a sky, saturate color, use wide angle lenses to exaggerate perspective which emphasizes graphic lines, and choose a time of day when lighting is especially beautiful or dramatic with the ultimate goal of -- in essence -- improving upon reality. We want to make everything we shoot look better than it does, and this is true even if the subject already looks great.

When I enter a stunning medieval cathedral, for example, I'm always overwhelmed by the artistry and the genius it took to create it. But the first thing I think about is how to photograph it so it looks even better than it does in reality. The same is true for everything. That's been my entire orientation to photography, and it's how all well-known photographers have approached this art form. Think about what the famous American Civil War photographer, Matthew Brady, did. For 'compositional purposes' -- arranging dead soldiers after a horrendous battle.

My photography tours, this eMagazine, and all of my online courses as well as my public speaking engagements to camera clubs are devoted to using the camera, and post-processing, to making reality more artistic. That's as it should be.

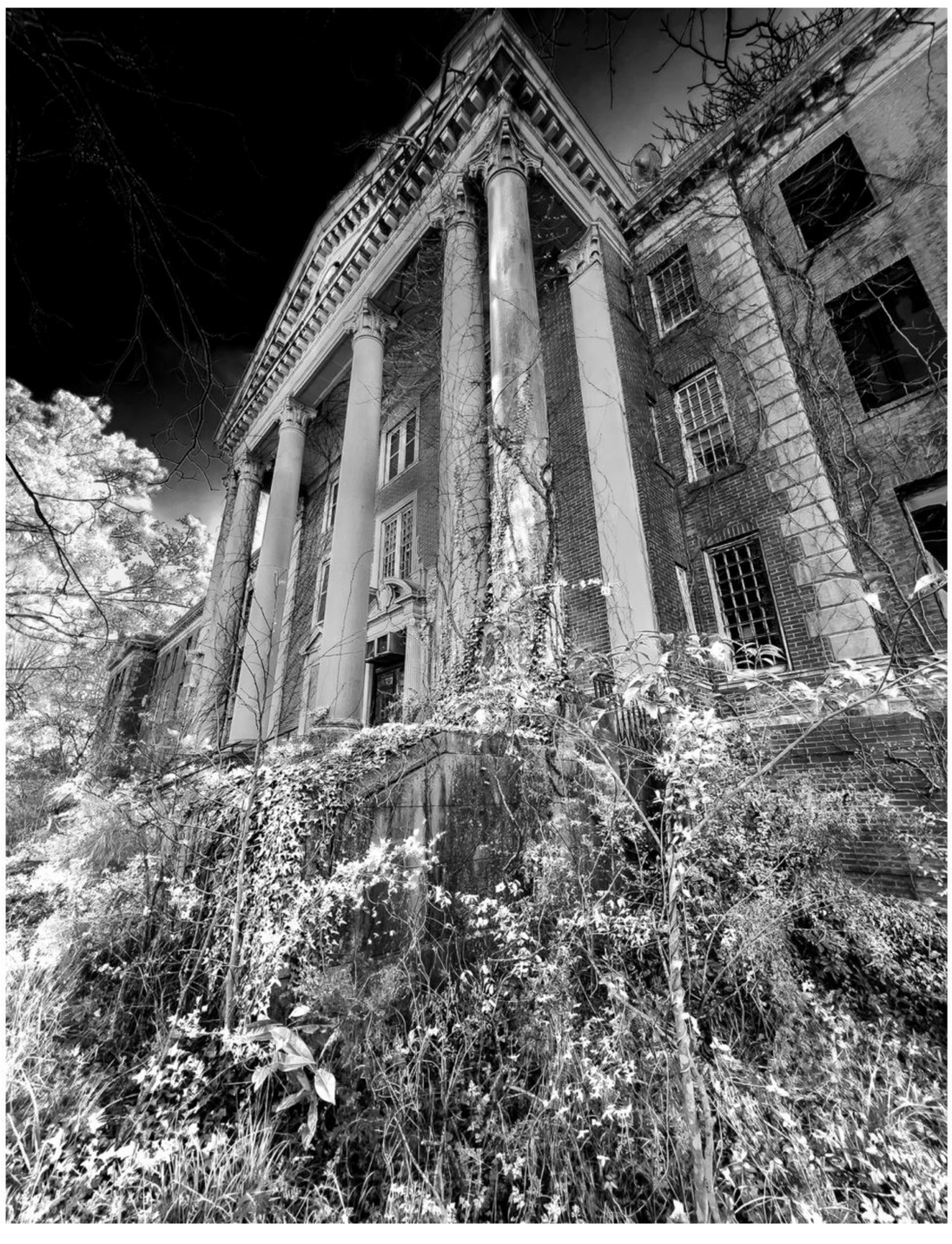
Jim Zuckerman
photos@jimzuckerman.com
www.jimzuckerman.com

Simulating
Black & white infrared

For many years I considered converting one of my camera bodies so it would only shoot infrared. Back in the day, photographers used both color as well as black and white infrared film, but with the advent of digital photography it was necessary to pay for a conversion from normative color to IR. In the end, I decided not to convert a camera for two reasons: 1) It would require carrying an extra camera body -- I'm trying to lighten my load, not increase it -- and 2) even though I like the look of infrared black and white, I didn't think I'd shoot it enough to warrant the cost of the conversion plus the additional weight and volume of carrying the additional body.

Thanks to Photoshop, we can now simulate the look of black and white infrared easily, quickly, and without burdening ourselves with more gear to carry in the field.

The main characteristics of monochromatic infrared that distinguishes it from regular black and white are black or unusually dark skies and white vegetation. You start with a color image,



and then convert that into what looks like infra -red. The results are virtually identical to shooting with black and white infrared film

The procedure

There are three ways to convert color into black and white in Photoshop. If you want to retain the RGB aspect of the files, use **Image > adjustments > hue/saturation**. In the dialog box, move the *saturation* slider all the way to the left. The image is now black and white.

To eliminate all the color information and end up with a grayscale image, use **Image > mode > gray scale.**

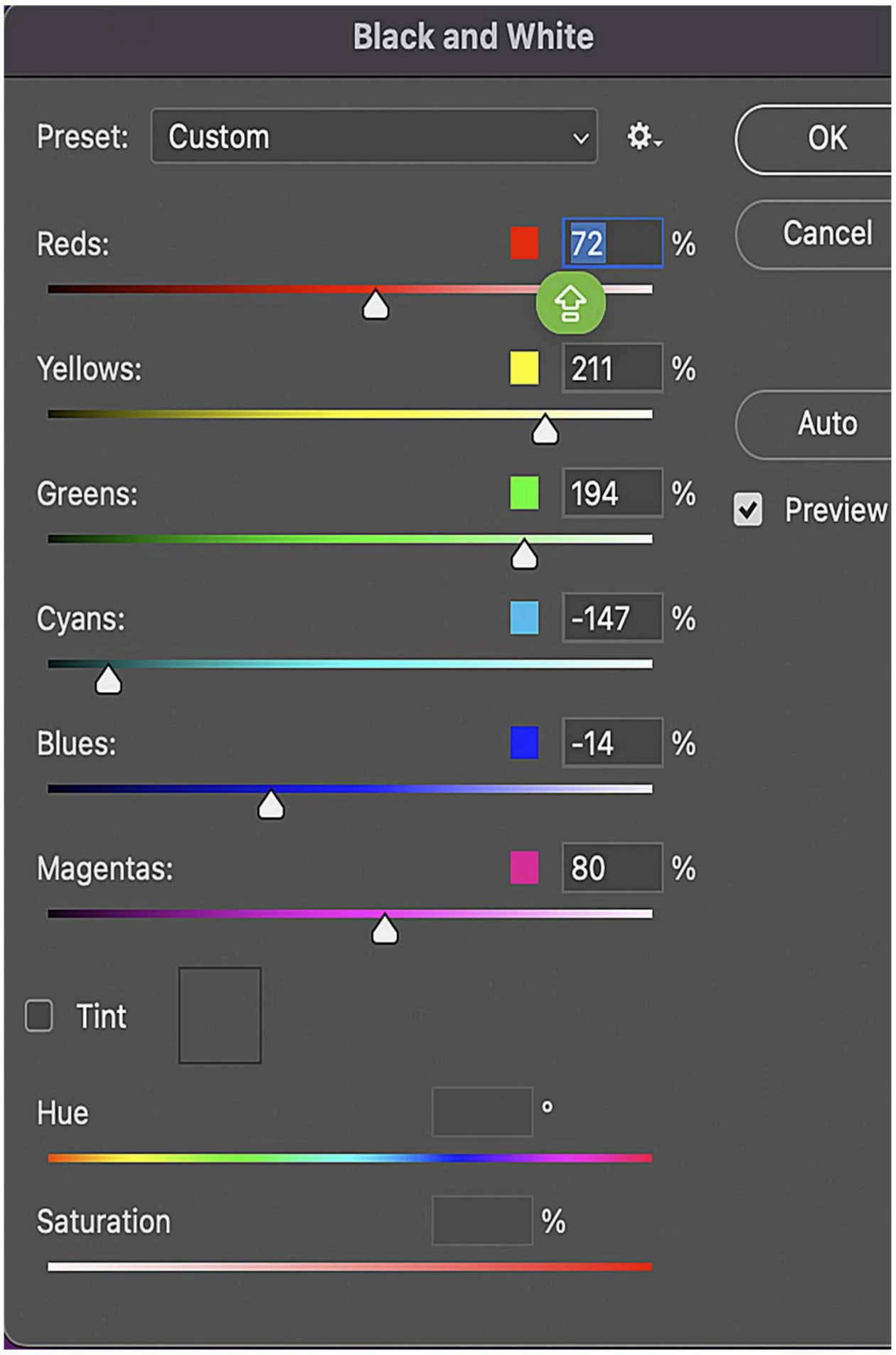
Alternatively, you can convert a color image to black and white with the Photoshop pulldown menu command, **Image > adjustments > black and white.** This is the one I prefer because it gives you maximum control over the tones in the image, and it's the tool you have to use when simulating black and white infrared.

When you open the dialog box with this command, you'll see several sliders in color, right. Even though your image will now appear completely black and white, behind the scenes it remains an RGB image. That means you can manipulate individual colors. However, the colors have been converted to monochromatic tones.

The conversion of the Georgia State Hospital in Milledgeville shown on page 4 -- this is one of the places visited on my "Abandoned in Georgia" photo tour -- was done using the slider positions shown at right. Notice that both the cyan and blue sliders were moved to the left, darkening those colors. That's why in the resulting image on page 4 the sky is black. This shows the sky isn't just one color; in fact, it's a myriad number of shades of both blue and cyan.

Foliage is similarly nuanced with color. We think of leaves as being 'green', but in addition leaves are imbued with tones of yellow. Therefore, to turn spring and summer leaves into shimmering shades of white, indicative of infrared, you have to move both the green and the yellow sliders to the right.

If the image doesn't have a particular color, like magenta, moving that slider will have no effect on the photograph.



The two main changes to be made using the dialog box above, then, is to move the cyan and blue sliders to the left and the green and yellow sliders to the right.

The original black and white infrared film had a grain structure to it. If you want to simulate that, use **Filter > noise > add noise.** In the dialog box that opens, there is a slider that allows you to add as much as you want. Make sure you check the 'monochromatic' box. This means Photoshop will add noise devoid of color which is exactly what you want in black and white images. §

The Birds of Costa Rica

May 13 - 23, 2024

Boat-billed heron

Violetear hummingbird

The 6 Biggest Reasons Your Pictures Are Not

SHARP

Nothing is more aggravating to a photographer than taking an otherwise-great-picture that's *almost* sharp. That's happened to me too many times, and I'm sure it has plagued you as well.

I've thought about this vexing issue a lot, and over time I've identified six main reasons why our images are disappointingly less than tack sharp.

1. Shutter speed too slow. This is the main cause of unsharp pictures. Whether your subject is moving fast, like the snowy owl in flight, shown below, or a stationary subject like the old church in Wales on the next page, if your shutter speed isn't fast enough, especially when hand holding the camera, the resulting images will not be sharp.

The general rule when hand holding the camera is you should be using 1/60th of a second or faster for wide angle lenses. Can you get away with slower speeds if you hold your breath, push gently on the shutter button, and spread your feet apart for a secure stance? Yes, you can, but this increases the risks of taking pictures that are not as sharp as they could have been had the shutter been faster. Sometimes you simply

have no choice, such as in a dark cathedral where no tripods are allowed and your ISO is already high. If you are shooting wide open, the only option for getting the shot is to slow the shutter down. But the ideal is to maintain the 1/60th of a second guideline.

For telephoto lenses, the rule is the shutter speed should be the reciprocal of the focal length. In other words, if you're shooting with a 400mm lens, the shutter should be 1/400th or faster. If you are shooting with a 500mm plus a 1.4x teleconverter, then ideally the shutter should be 1/700th or faster. With long lenses, I use this guideline even if I'm using a tripod because, inherent in their length and weight, movement is inevitable. With long lenses, that movement is magnified, and that in turn means the shutter has to be fast enough to freeze the movement.

If you are shooting birds in flight, animals running, sports action, or other subjects that move fast, you must use the appropriate shutter speeds assuming you don't want a 'creative blur'. For example, clients of mine have said when they photograph birds flying, they like the tips of the wings to be blurred because that implies speed. If you like that, then I'm not going to argue. For me, though, I like tac sharp wing tips like in the snowy owl shot on the previous page. That requires a minimum of 1/3200th shutter. For horses galloping, I use 1/1250th or faster. During my winter wildlife workshop in Montana where we photograph foxes (who are incredibly fast), wolves, lynxes, a snow leopard (also very fast), and more, I suggest a shutter of 1/2000th.

2. Raising the center column of your tripod too high. Many people who take my tours bring small, lightweight tripods for travel. This makes sense, but some of the tripods are short. When my clients use them, it's uncomforable to bend down and look through the camera. Therefore, they raise the center column to accommodate their height and this increases instability. You no longer have the

solid support of a tripod. Instead, you've created a cross between a monopod and a tripod. Movement can be introduced by the wind as well as the simple act of pushing the shutter. If you find yourself in this situation, the best thing to do is to use the self-timer built into the camera. With a gentle push of the shutter, you can use the 2-second timer. Assuming there isnt a strong breeze, this will result in sharp pictures.

3. The autofocus mechanism is fooled by other elements. Autofocus works on the principle that a machine can determine what the subject is. A lone tree silhouetted against the sky is easy as is a person standing against a red wall. But a leopard in the grass is a lot more challenging, and in scenarios like this one it's so easy for the AF to make a mistake. In the image below, you can see the grass in the foreground was the selected subject and not the cat.

In this case, the solution is to switch to a single focus point. You would then place that small area of the viewfinder on the leopard's face or body for accurate focusing. Or, you have to switch from autofocus to manual focus. You would then focus the old fashioned way -- by rotating the knurled focusing ring on the lens until the subject appears sharp in the viewfinder. This is predicated on having good enough eyesight to determine the point of critical focus.

4. The focus point arrangement isn't optimal. All of the cameras we use (except smart phones) have the ability to select the arrangement of autofocus points. This is important because at times some arrangements -- like a center cluster of 9 points -- are better than others in locking focus on a subject.

As an example, the festival picture I took in Indonesia, below, is busy with lots of elements, but a center cluster of 9 focus points easily distinguished the subject. Most subjects are placed in the center of the frame, so the odds are a group of centrally placed points will lock onto the subject, which is exactly what you want.

When I photograph birds against the sky, I switch to all the focus points. It's challenging to keep a flying bird in the center of the frame, especially when using a long lens, so all of the points have a good chance of focusing on the bird no matter where it is in the frame assuming nothing in the background diverts the AF mechanism.

For some wildlife scenarios, performances on stage, portraits, and street photography, I will choose to use a single focus point usually positioned in the center of the viewfinder but sometimes off-center.

5. Your tripod is too flimsy. Photographers have a love-hate relationship with tripods. They are burdensome, expensive, and they force you to tavel with a larger piece of luggage. But . . . they are necessary in so many situations. A super light and compact tripod looks very tempting, but too often they are not sturdy. Super light tripods can be used if there is no wind and you use either a cable release or the self-timer in the camera so when you snap the shutter the camera isn't jarred. Just be cognizant of the stability issue and direct your attention to doing everything possible to take sharp pictures.

6. Ground vibrations. When photographing cityscapes from a bridge, invariably the bridge itself vibrates due to vehicular and sometimes pedestrian traffic. It's easy to overlook this be-

cause you're focusing your attention on composition, exposure, and other factors that have to do with good picture taking.

When I took the picture of the Grand Canal in Venice, above, I was using a tripod and the exposure time was two seconds. I was standing on the Academia Bridge, a large wooden structure built in the 1930's. It was made only for pedestrians, but during carnival the sheer numbers of people walking across it cause the bridge to vibrate just enough to affect long exposure photography. I experienced the same vibration on Westminster Bridge in London, right, caused by cars and double deck buses.

The only thing to do in this situation is wait until there is a lull in the traffic and the vibrations momentarily cease before you shoot. That might take a while, but you have no choice. §

Ethiopia Photo Tour

Jan. 21 - Feb. 3, 2025

Addressing the Problem of HARSH LIGHT

Midday lighting under a clear sky is problematic. I'll take diffused light any day. Harsh light is contrasty, unappealing, and it makes you want to put your camera back into the photo backpack.

I recently shot an abandoned building in Georgia, below, and as you can see the shadows have gone dark, almost black, while the colors are weak and boring. There are two methods I use to make this less-than-desirable situation we are often faced with look better.

1. I take an HDR sequence of 5 images with one f/stop increments. In Photoshop, I stack all 5 shots and then adjust the shadows, highlights, and midtones as well as the color in Abode Camera Raw (or Lightroom).

2. I take one correctly exposed frame and then, in ACR, or Lightroom make the following adjustments based on what looks natural to me:

A. I first move the *shadows slider* to the right. Depending on the original contrast in the scene, I may move the slider all the way to the right side to reveal detail in the very dark shadows. You can see in the image below that the darkest parts of the image show detail. They aren't unnaturally light, but they reveal detail that wasn't visible in the original.

B. I move the *highlight slider* to the left. This tones down bright highlights. In this example, the sky was washed out and moving this slider brought back some subtle detail.

C. I move the *vibrance slider* to the right, increasing saturation. I prefer working with vibrance in most cases because the *saturation slider* introduces too much yellow in the image.

Some people will argue that increasing exposure in the shadows introduces too much noise. While that is often true, the 3rd party Photoshop plugin, Topaz DeNoise, significantly reduces or eliminates altogether any noise created. With more megapixels in your camera, this problem is virtually eliminated.

If you do find that lightening shadows adds unwanted noise, then use the first method I described. Take an HDR seqeuence of images. If the contrast in the scene is severe, instead of a 5-frame sequence, take 7 frames. Doing this means there will be no additional noise introduced to the image when the various frames are stacked together.

For the image below, I used the second method -- I simply worked with sliders in ACR. It's important not to overdo the shadows slider. §

PATAGONIA PHOTO TOUR

October 15 - 26, 2024

Photography Quiz

1. A 2x teleconverter loses how much light?
    a. 1 f/stop
    b. 2 f/stops
    c. 2 1/3 f/stops
    d. 3 f/stops

2. The complementary color of cyan is:
    a. Blue
    b. Yellow
    c. Green
    d. Red

3. On most cameras, what does Tv stand for?
    a. Tonal value
    b. Telephoto value
    c. Time value
    d. Tonal variation

4. What is a pixel in photographic terms?
    a. 1000th of a megapixel
    b. The speed at which the shutter interacts with the digital sensor
    c. A single square unit of color and exposure information in an image
    d. The transition between zeros and ones in forming the image

5. How many pixels would make up a 45 megapixel image?
    a. 4500
    b. 45,000
    c. 450,000
    d. 45,000,000

6. From one full second to 1/15 second is how many stops?
    a. Eightf/stops
    b. Five f/stops
    c Four f/stops

7. If you photograph a black dog against a black wall on fully automatic exposure mode:
    a. The dog would be correctly exposed
    b. The dog would be overexposed
    c. The dog would be underexposed

8. If you use auto white balance (AWB) at sunrise and sunset, the colors in the resulting images will be as you see them:
    a. True
    b. False

9. An incident light meter never gives a false reading of snow if used correctly.
    a. True
    b. False

10. Depth of field depends on:
    a. Camera to subject distance
    b. Lens aperture
    c. Focal length of the lens
    d. All of the above
    e. None of the above

Answers on page 45

UPCOMING PHOTO WORKSHOPS

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 9 - 13, 2025

Frog & Reptile Workshop

Get upclose and personal with exotic and colorful dart frogs and primitive looking reptiles. This is a macro photography workshop. We use a ring flash or similar for outstanding nature images. This takes place in a hotel conference room with natural looking backgrounds. Held in Kansas City.

August 17 - 18, 2024

Carnival in Venice

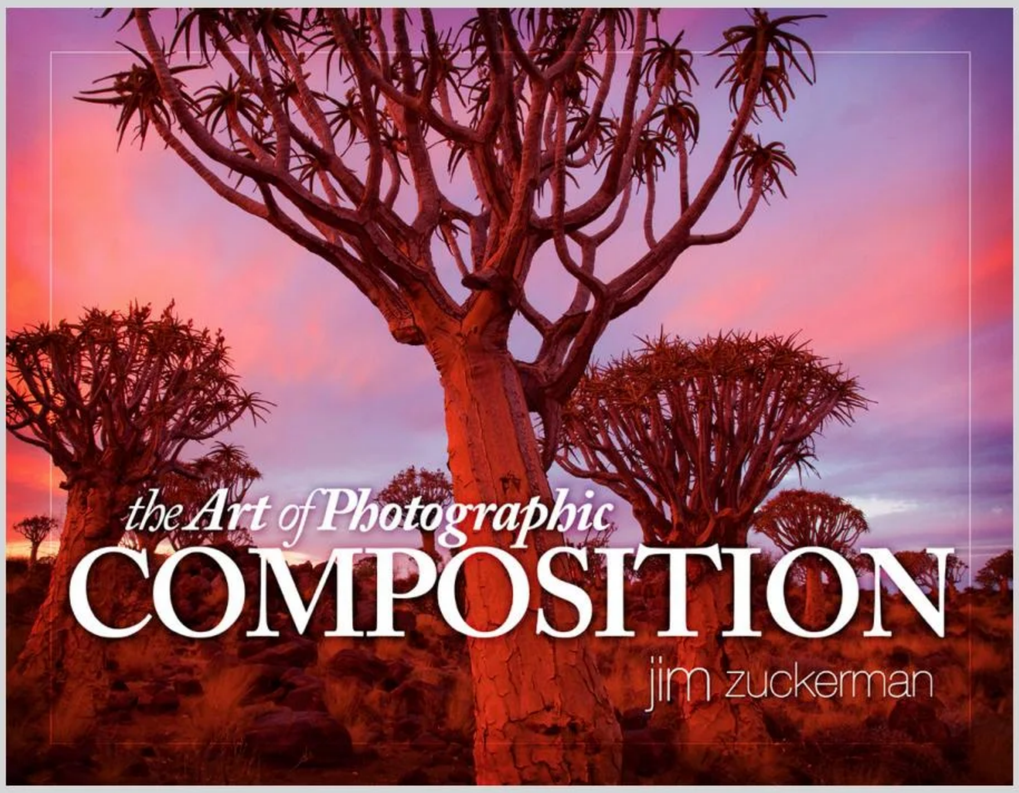
Photograph amazing costumes in a Medieval environment. We shoot inside a 16th century palace, in an iconic gondola, in a stunning bedroom with traditional Venetian decor, and in other great locations. The photography as well as the experience is phenomenal.

February 23 - March 1, 2025

Expand your photographic artistry with

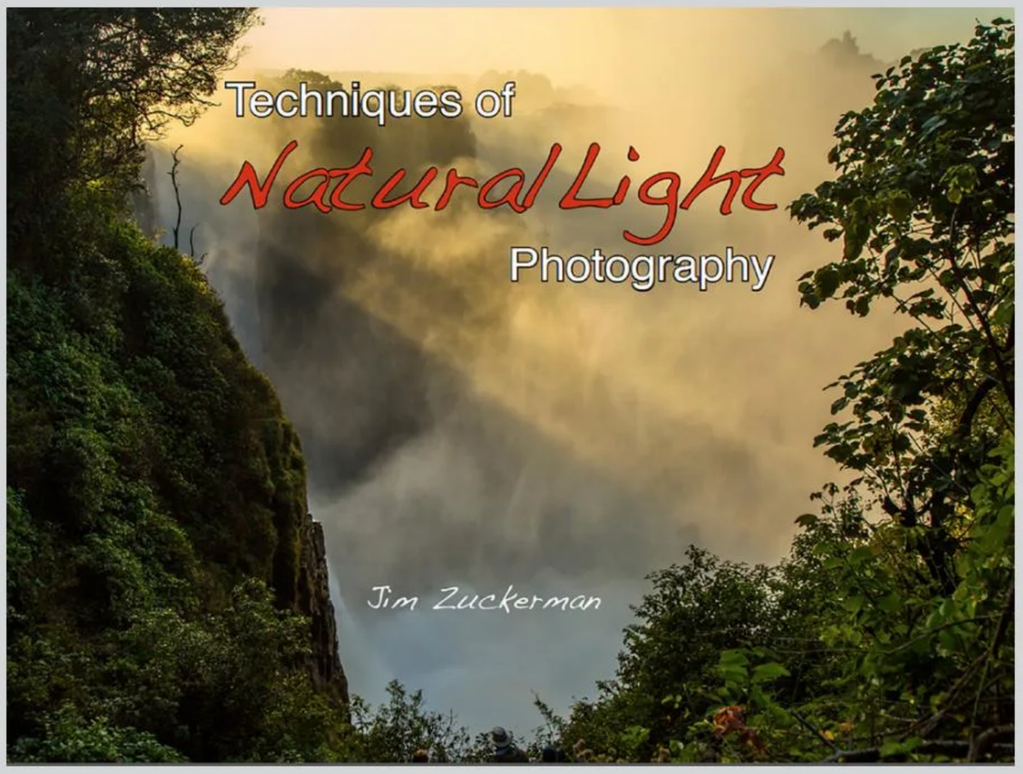
eBooks

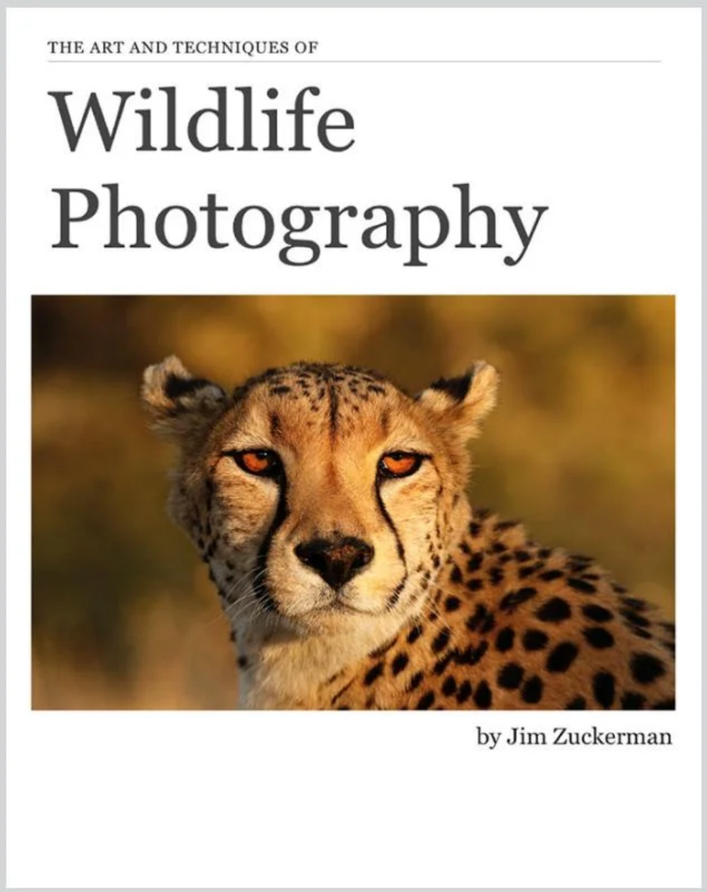
Click on any ebook to see inside



eBooks continued

Click on any ebook to see inside





Mystical Swamps of Louisiana

October 29 - November 2, 2024

What's wrong with this picture?

The biggest problem with photographing butterflies is they often hold their wings in a dihedral position -- a V shape -- and when shooting with a macro lens where depth of field is so shallow, it's almost impossible to render the small subect completely in focus. That was the case with this butterfly I found nectaring on flowers in Slovakia. Butterflies have such beautiful and intricate detail that it's a shame to capture them with only parts of their wings and bodies are out of focus.

What really bothers me about this picture is that both the right forewing and hindwing are soft. It's common to see this in macro photography, but I don't like it. Out of focus backgrounds are not only acceptable, but often usually desirable. It seems to me there's no point in making the effort to capture subjects with such great detail and then render them, or a part of them, too blurry to appreciate.

The problem, of course, is you need a shutter speed fast enough to freeze the fluttering of the wings and an ISO low enough to maintain maximum picture quality. This means that the lens aperture almost always ends of being too large for sufficient depth of field.

The solution is to be patient and follow the butterfly as it flutters from flower to flower hoping at some point it will hold its wings flat. If and when that happens, you need to position yourself so the back of the camera, i.e., the plane of the digital sensor, is as parallel as possible to the plane of the butterfly's wings. This means you'll obtain complete depth of field at any lens aperture. t Butterflies are sensitive to moving shadows because it could mean danger; they take flight as soon as they see an encroaching shadow. Therefore, move with slow deliberation until you gain the best angle that offers the most depth of field. §

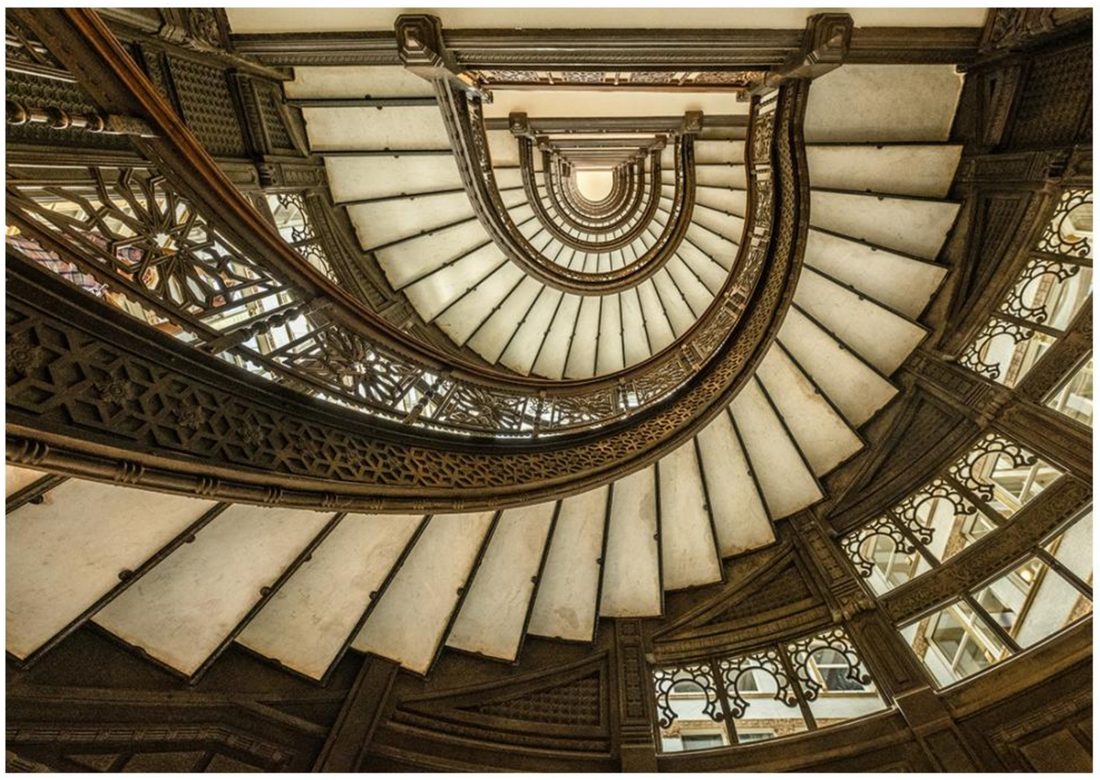
Switzerland Photo Tour

September 16 - 24, 2024

SHORT AND SWEET

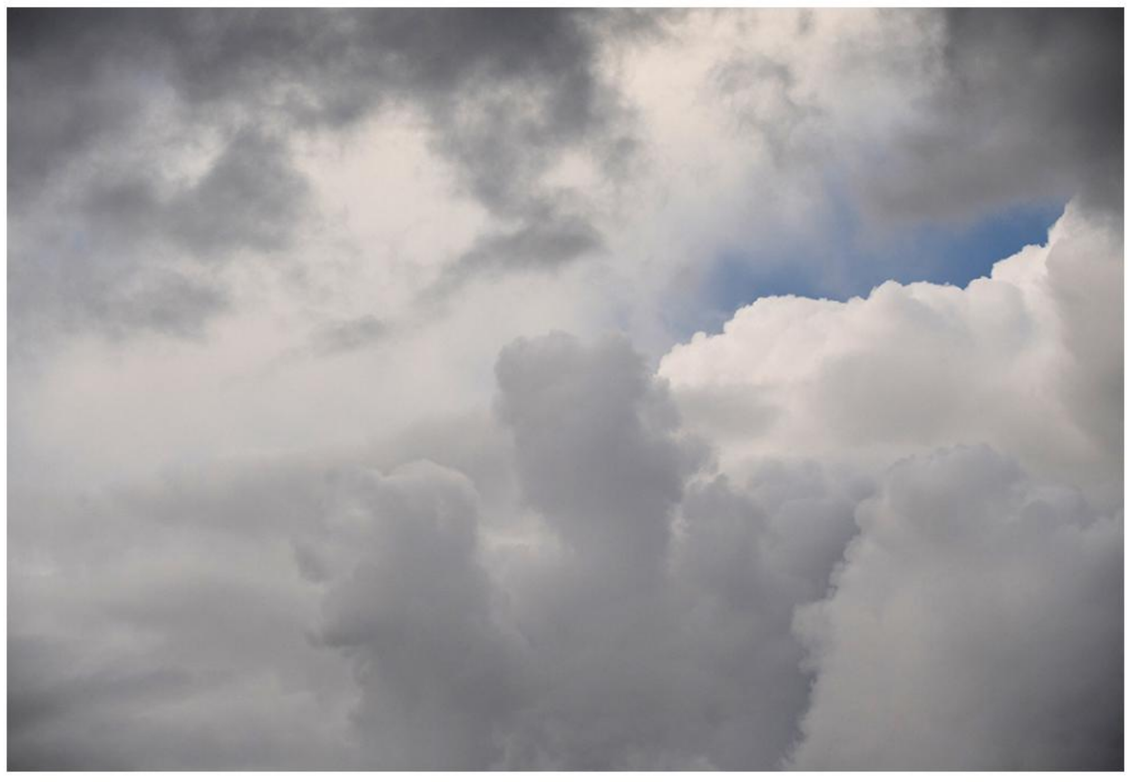
1. Use your smart phone to take test shots just like photographers in the past used Polaroid film to study light and shadow in studio environments. Smart phones can also be used to test pano shots. When you like what you see, then you can take the several frame sequence with your 'real' camera.

2. Be on the lookout for spiral staircases. When I travel, this is one of the things on my list to find. They make awesome subjects, and you can find them sometimes in the most unlikely places. This one is in an office building called The Rookery in Chicago. You'll want the widest lens you have to dramatize the design.



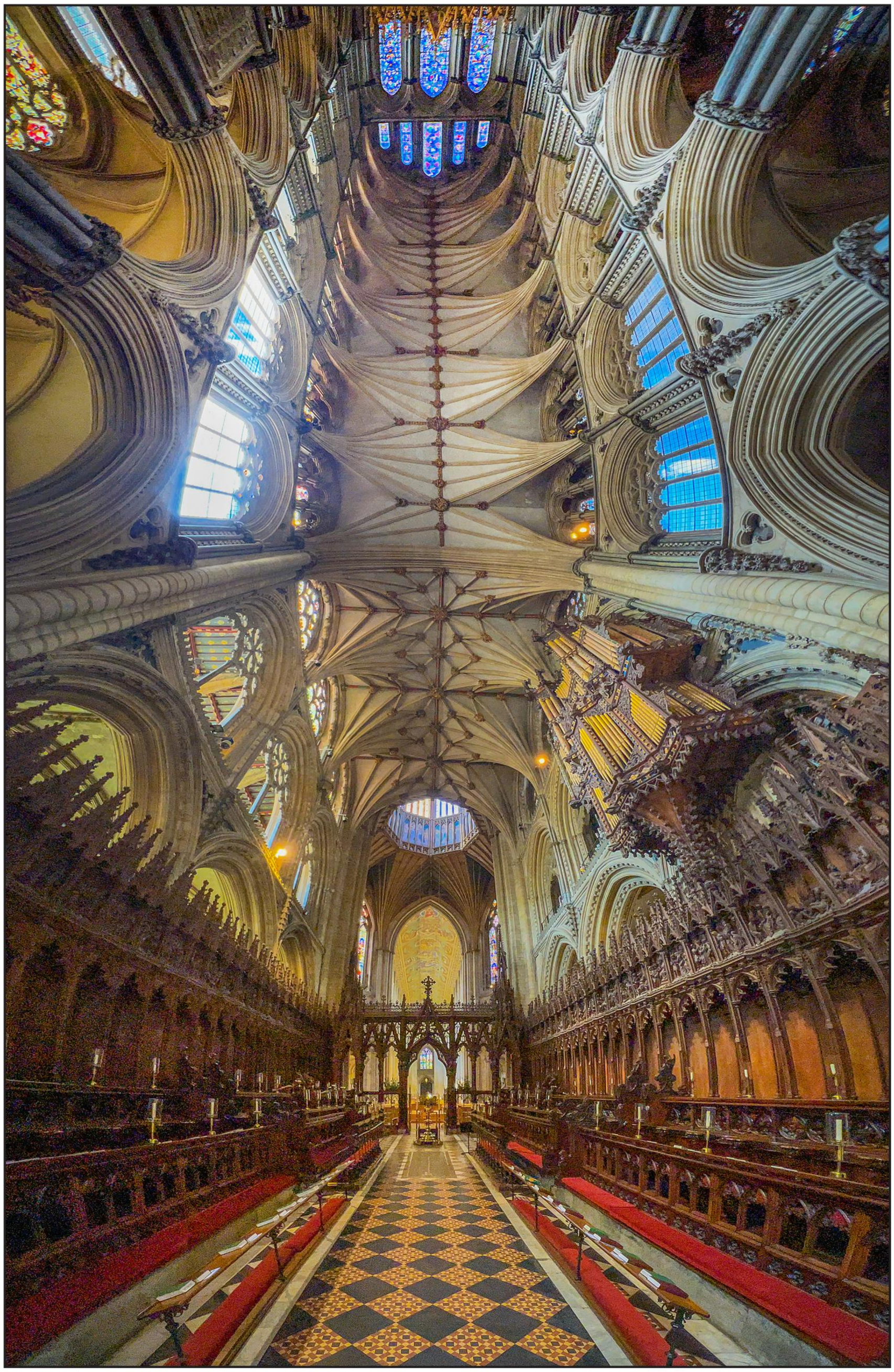
3. Always pay attention to the background, even with family portraits. Nothing can ruin a picture faster than distracting backgrounds. Simplicity always works--an out of focus tree, a stucco wall, the sky. We all take snapshots without thinking about what's behind the subject, but it makes a big difference if you do.

4. If you don't have one already, start a folder with a collection of skies. A great sky behind any subject makes a huge difference in artistry and drama. Shoot cloudy skies, sunrises/sunsets, stormy skies, rainbows, lightning, and more. Take horizontals and verticals, and you'll definitely find a use for them. §



England & Wales

September 4 - 14, 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 . . Why do smart phones have such incredible depth of field? We have no control over it, but it amazes me how everything is so sharp throughout each image.
Dave Lapides, Flint, Michigan

A: Smart phones have extensive DOF because the physical diameter of the lens aperture is so small. Lens apertures of various formats offer differing amounts of depth of field. For example, in the 8x10 inch format like Ansel Adams used, f/32 didn't offer as much DOF as f/32 in a 35mm camera or a full frame digital camera simply because the f/32 aperture in the 8x10 camera was physically larger. It had to be larger to let in more light to travel the distance from the lens to the film through the lengthy bellows. Ansel was a member of the "F/64 club" because large view cameras had to have f/stops down to f/90 and more to provide the same depth of field we enjoy in our digital cameras at f/32. §

Partial List of Photography Tours 2024 - 2025

HOLLAND & BELGIUM
Apr/May 2024

BIRDS of COSTA RICA
May 2024

ICELAND DRONE TOUR
Aug/Sept 2024

COLORADO in AUTUMN
Sept/Oct 2024

PATAGONIA
Oct 2024

SWAMPS of LOUISIANA
Oct/Nov 2024

AUTUMN in JAPAN
Nov 2024

SNOWY OWLS in CANADA
Jan 2025

WINTER WILDLIFE
Feb 2025

GREAT GRAY OWLS, CANADA
Feb 2025

FAROE ISLANDS
Apr/May 2025

BHUTAN
Mar/Apr 2025

For a complete list of all the photo tours/workshops Jim conducts, go to his website: www.jimzuckerman.com.

Great Gray Owls, Canada

February 16 - 21, 2025

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.

Dr. Nancy Hopwood, Ann Arbor, Michigan *Russia photo tour, India photo tour, China photo tour, Tuscany photo tour, Newfoundland photo tour, and Coast of France photo tour.*

© Nancy Hopwood

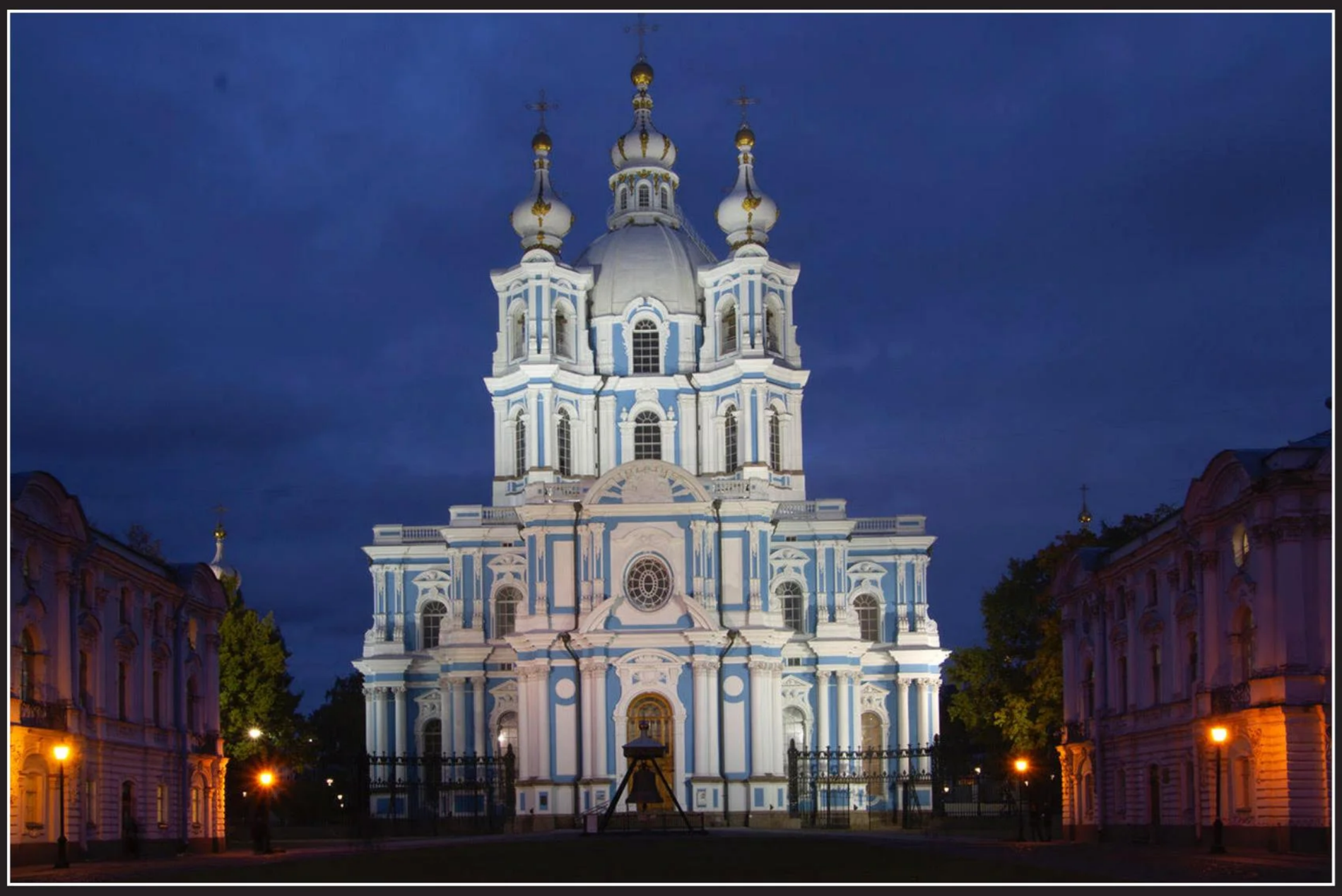
Student Showcase, continued

© Nancy Hopwood

Student Showcase, continued

© Nancy Hopwood

Student Showcase, continued



© Nancy Hopwood

Autumn in JAPAN

November 20 -29, 2024

HOLLAND & BELGIUM

April 24 to May 2, 2024

Click on the past issues of

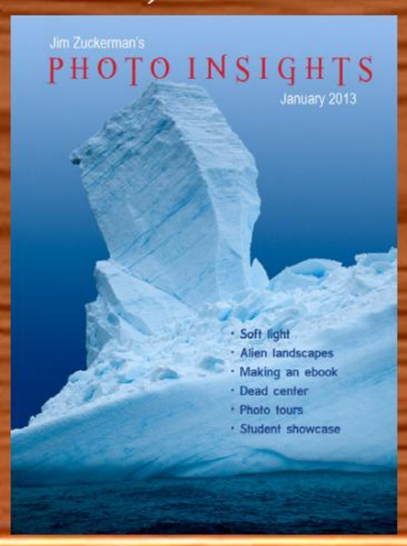
PHOTO INSIGHTS

you would like to read.

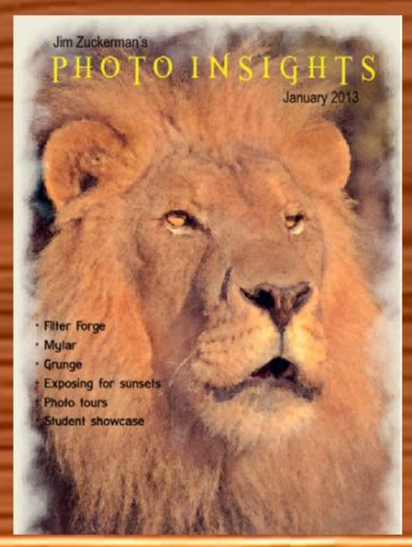
Nov. '12

Dec. '12

Jan. '13



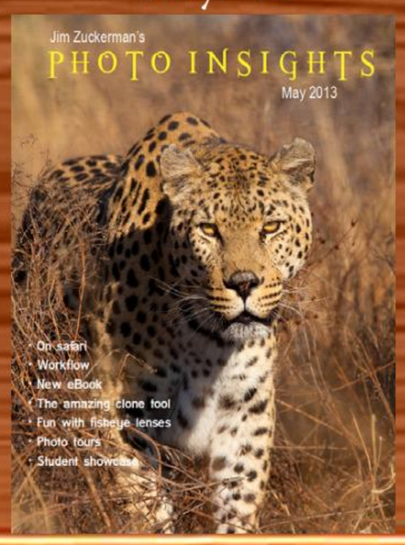
Feb. '13



Mar. '13

Apr. '13

May. '13

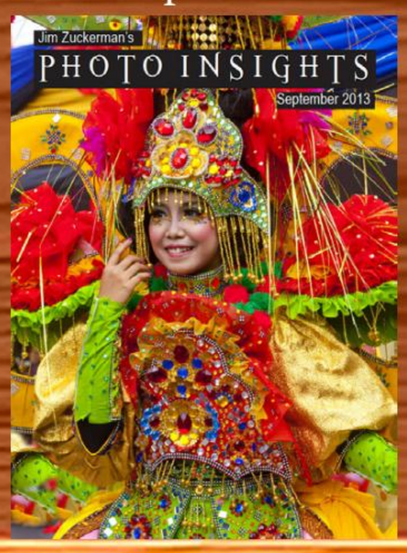


Jun. '13

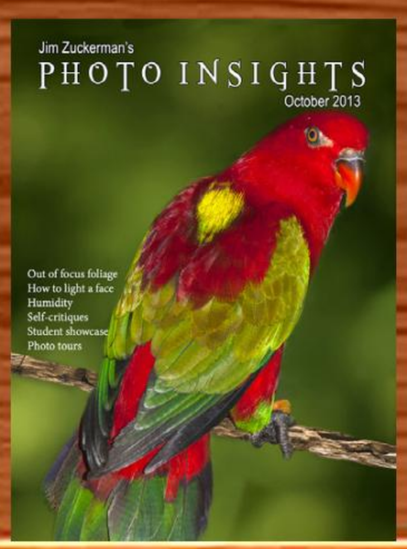
Jul. 13

Aug. '13

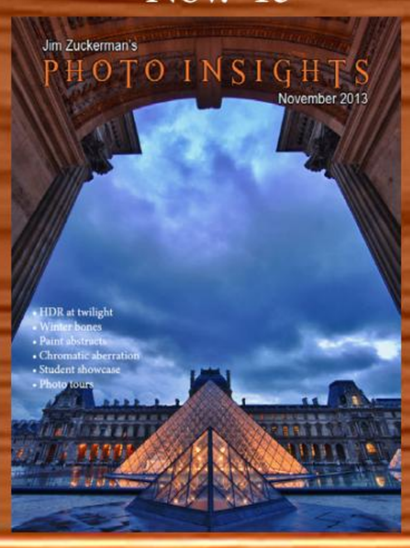
Sept. '13



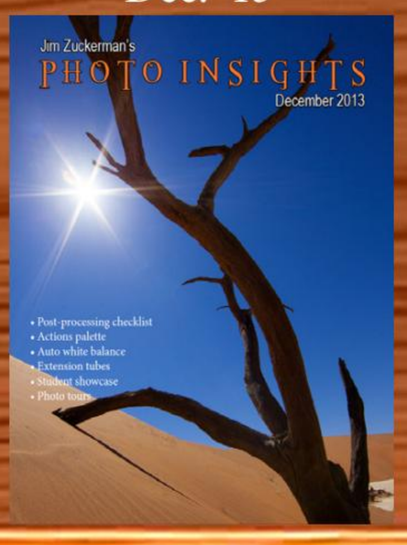
Oct. '13



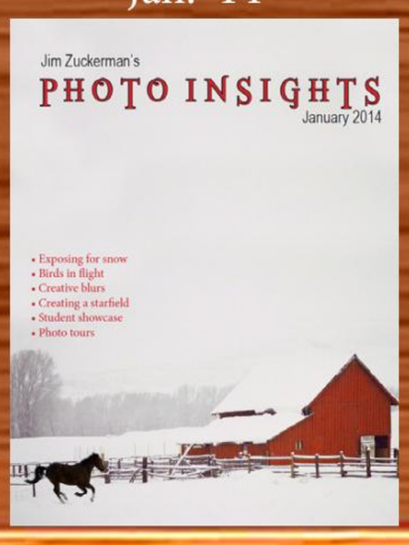
Nov. '13



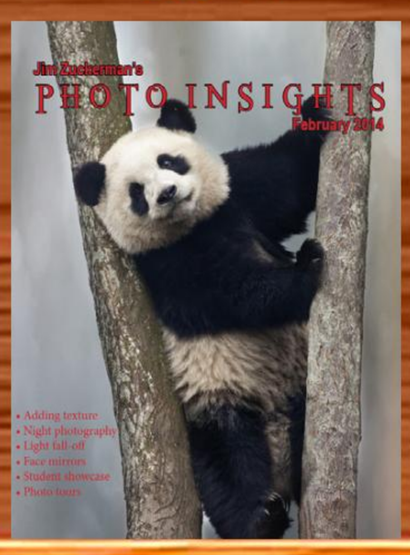
Dec. '13



Jan. '14



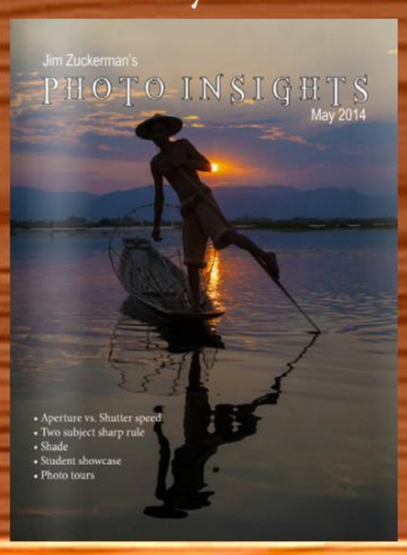
Feb. '14



Mar. '14

Apr. '14

May '14



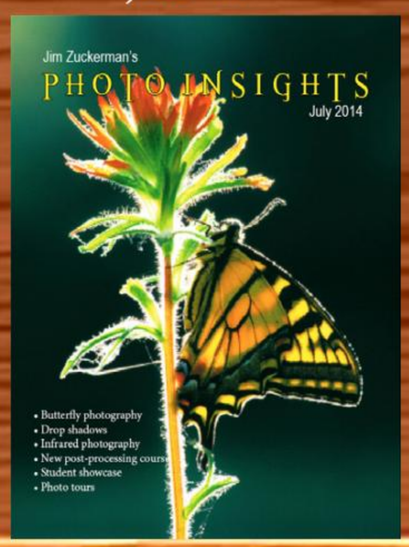
Jun.'14

Click on the past issues of

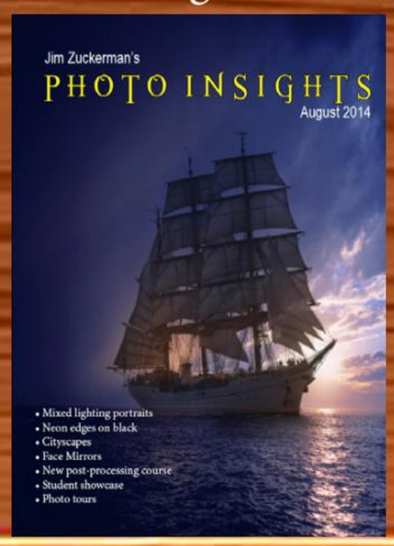
PHOTO INSIGHTS

you would like to read.

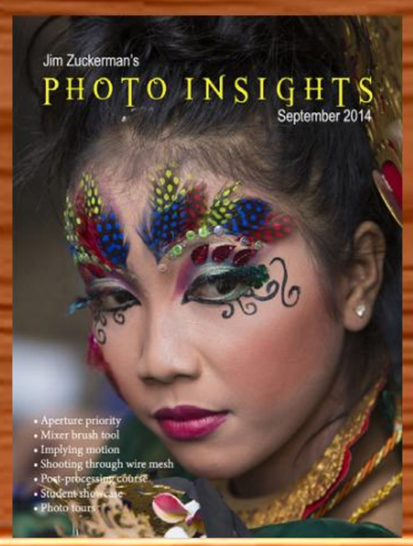
Jul. '14



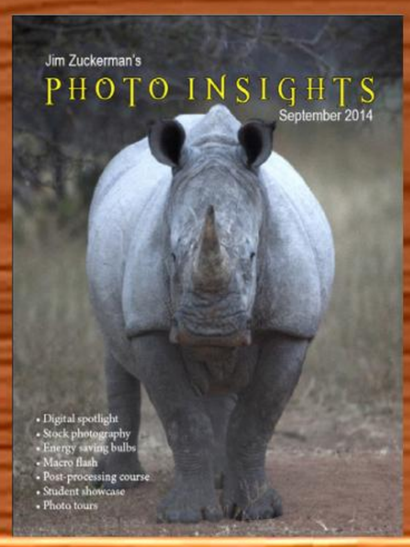
Aug. '14



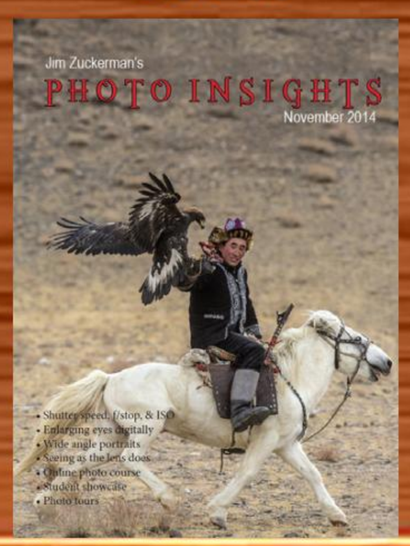
Sept. '14



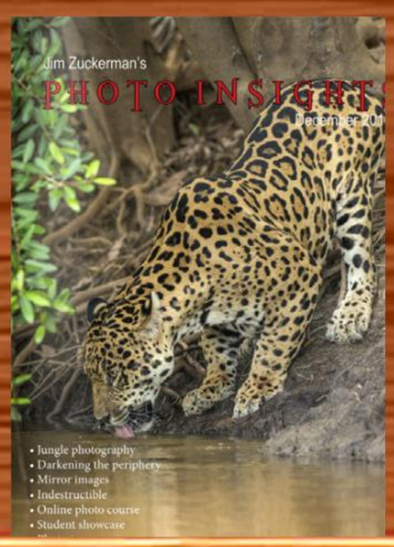
Oct. '14



Nov. '14

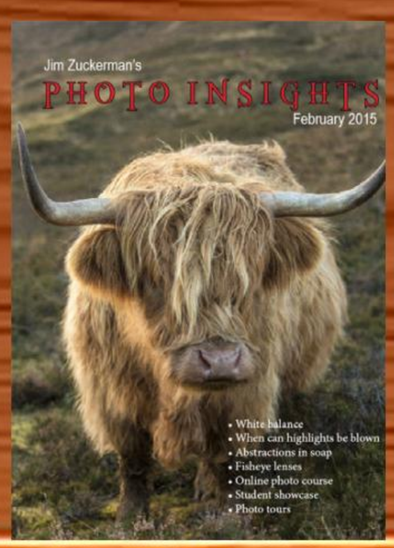


Dec. '14



Jan. '15

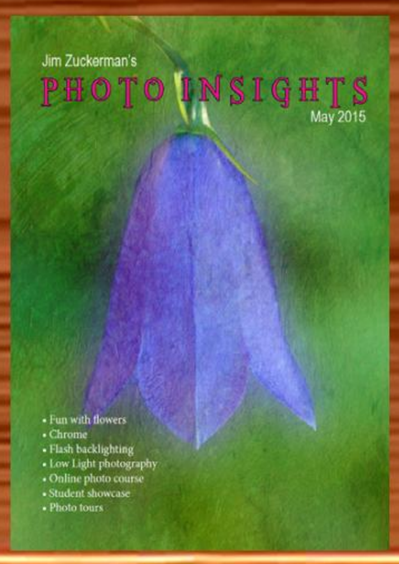
Feb. '15



Mar. '15

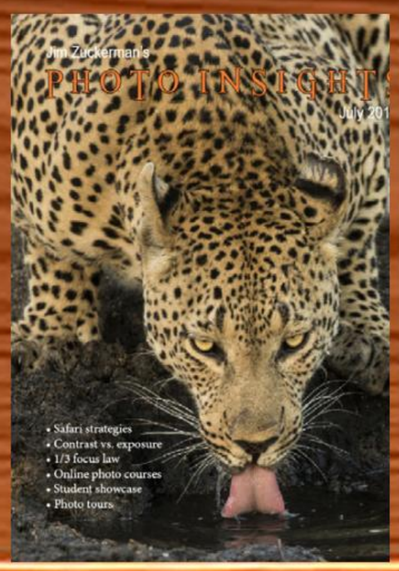
Apr. '15

May '15

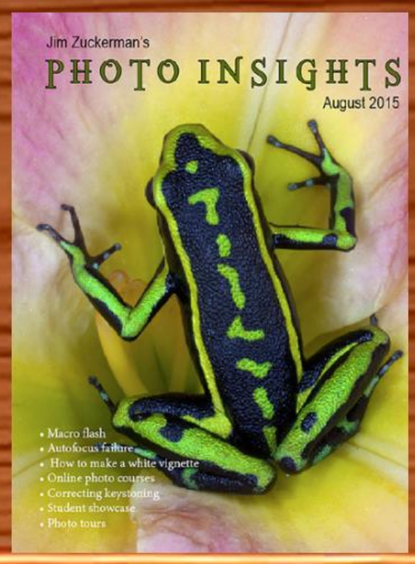


Jun '15

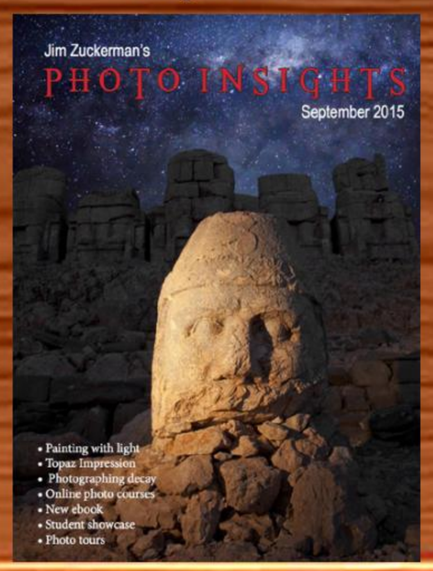
Jul.'15



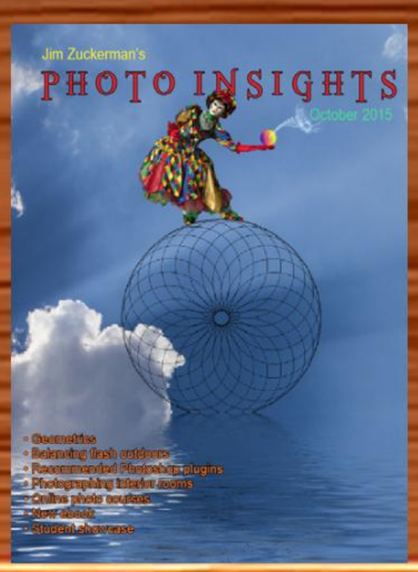
Aug.'15



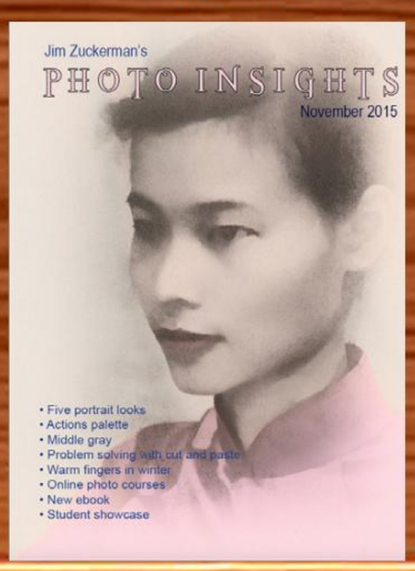
Sept.'15



Oct.'15

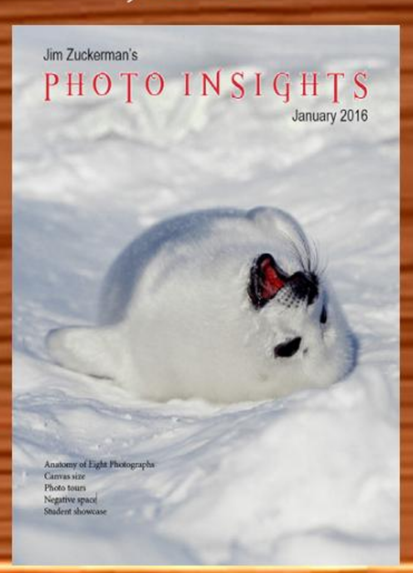


Nov. '15

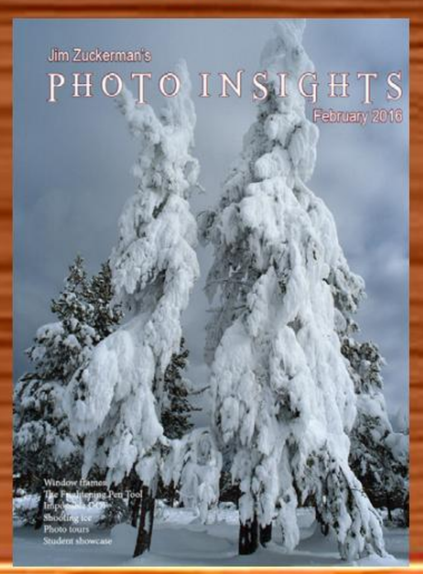


Dec. '15

Jan. '16



Feb. '16



Click on the past issues of

PHOTO INSIGHTS

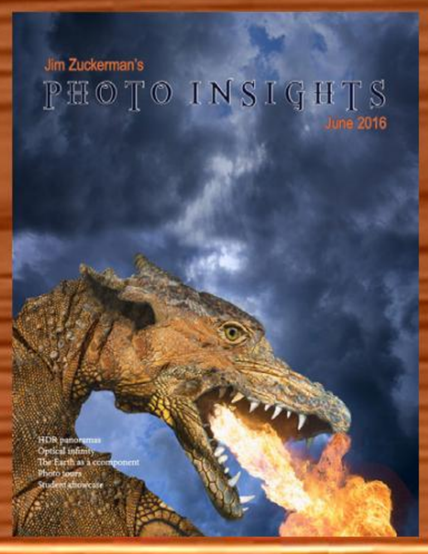
you would like to read.

Mar. '16

Apr. '16

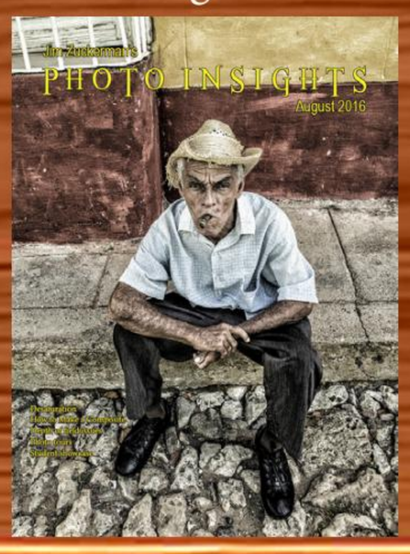
May '16

Jun '16

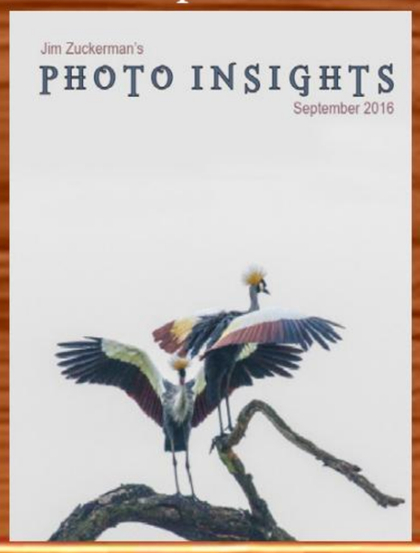


Jul. '16

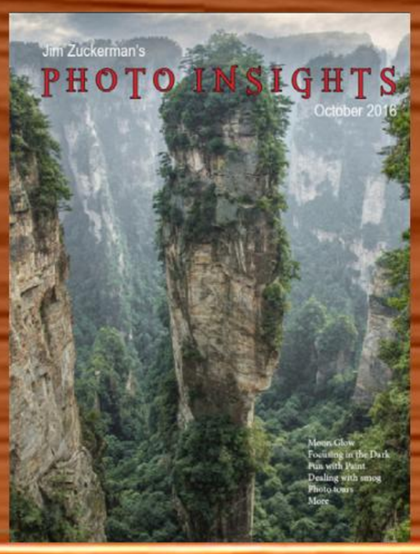
Aug. '16



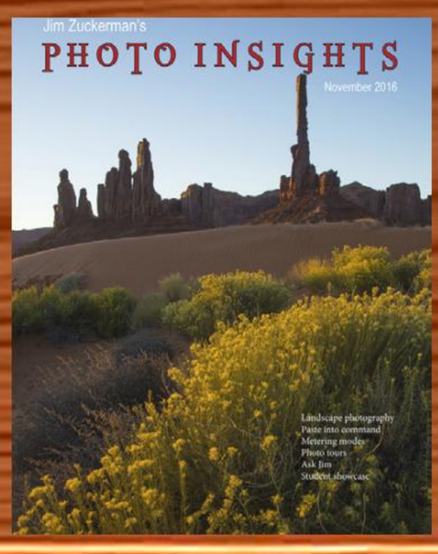
Sept. '16



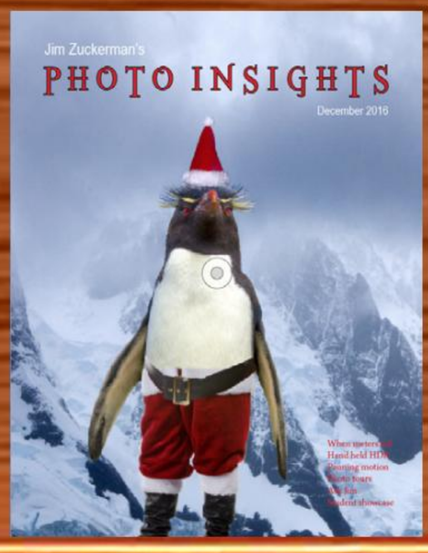
Oct. '16



Nov. '16

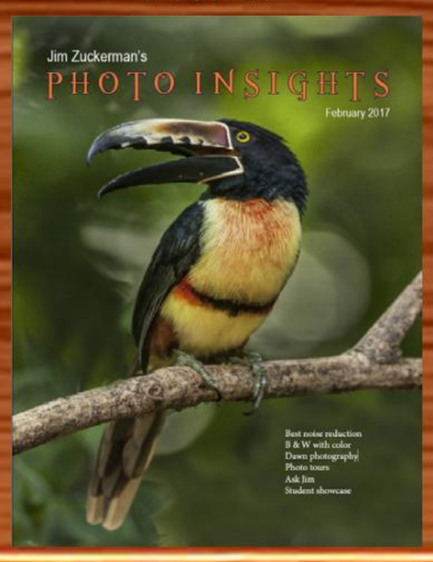


Dec. '16



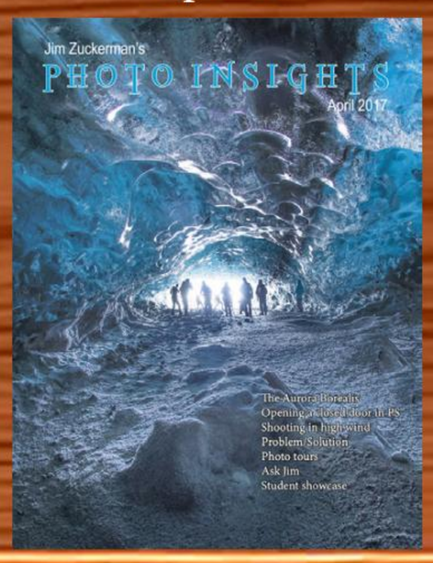
Jan. '17

Feb. '17



Mar. '17

Apr. '17

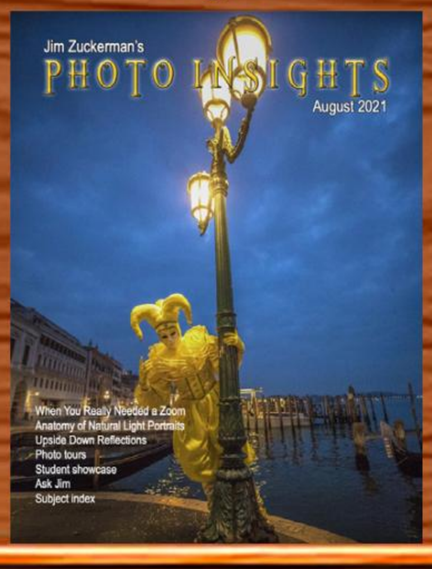


May '17

Jun '17

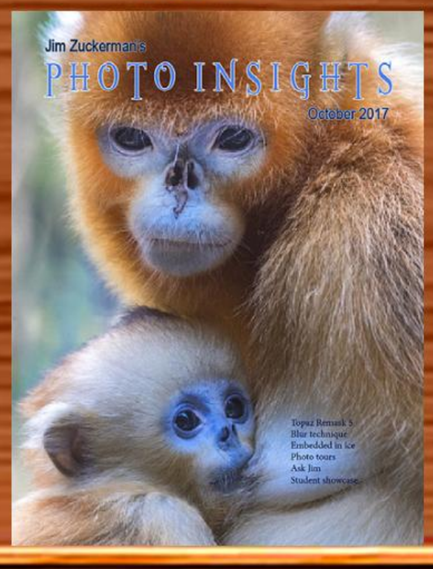
Jul. '17

Aug. '17



Sept. '17

Oct. '17

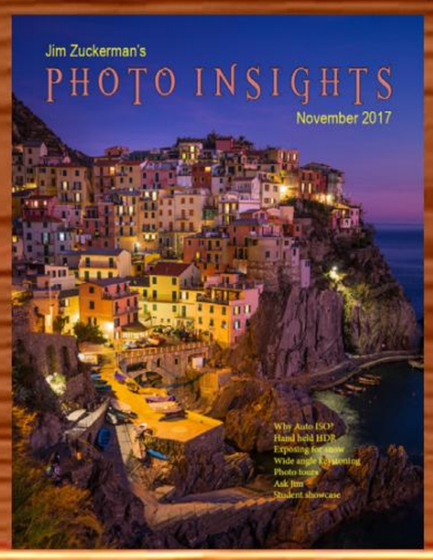


Click on the past issues of

PHOTO INSIGHTS

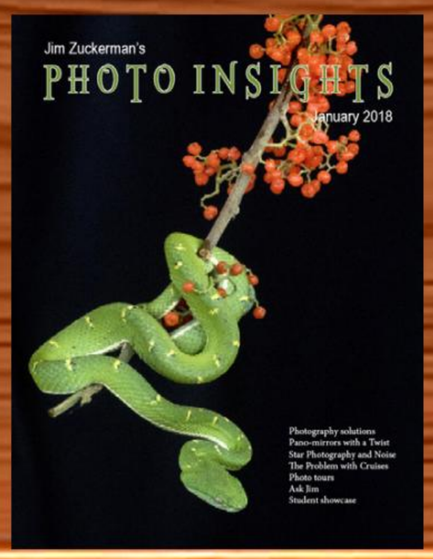
you would like to read.

Nov. '17

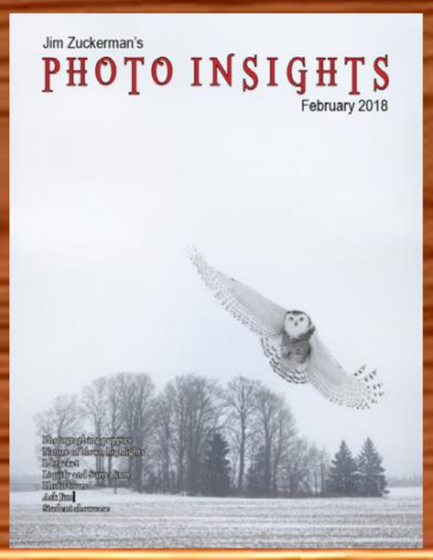


Dec. '17

Jan. '18



Feb. '18

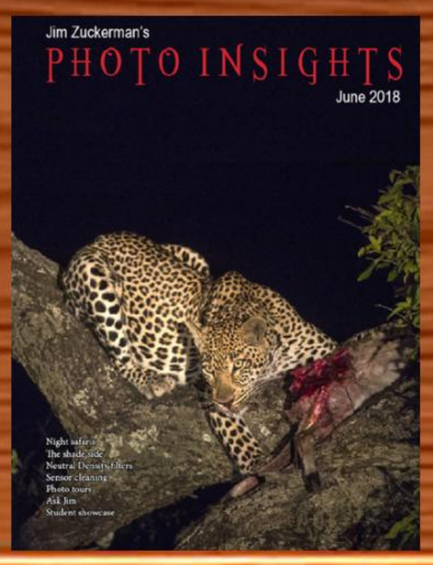


Mar. '18

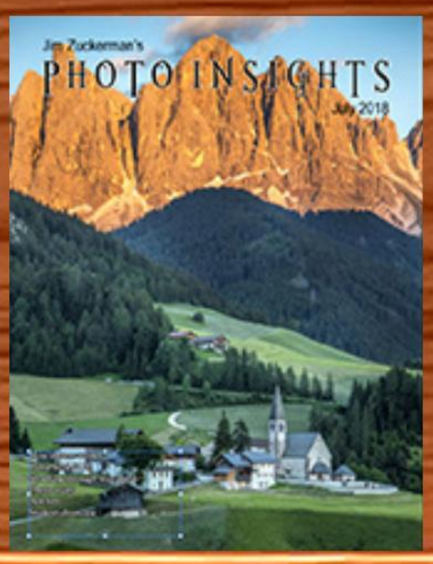
Apr. '18

May '18

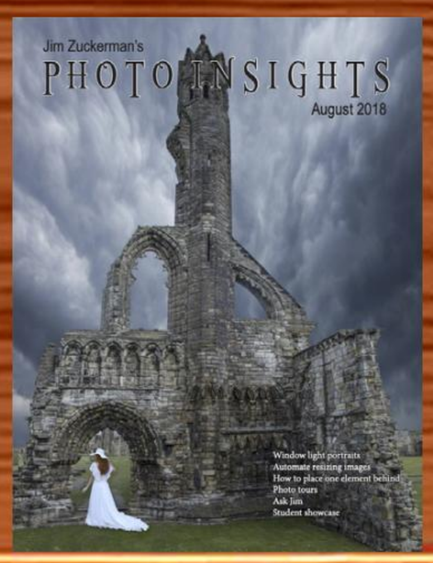
Jun '18



Jul '18

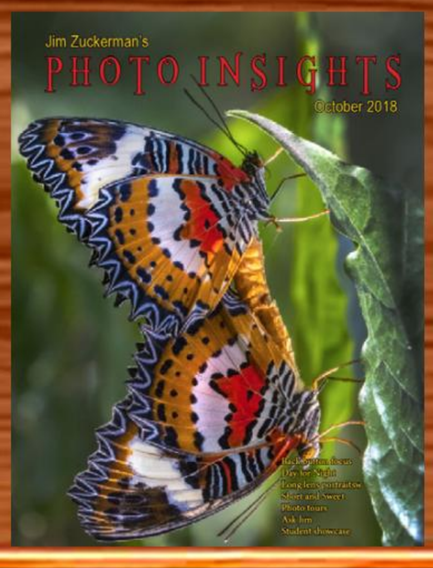


Aug '18

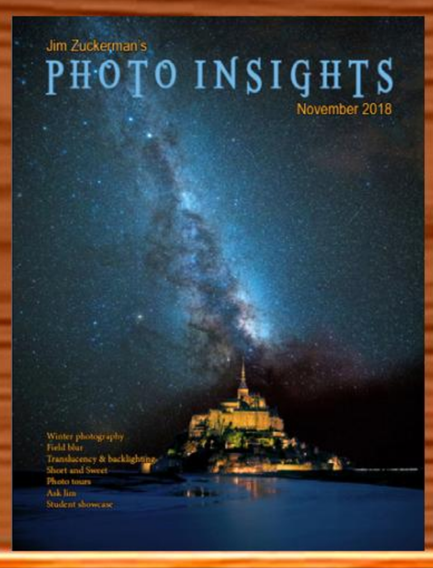


Sept. '18

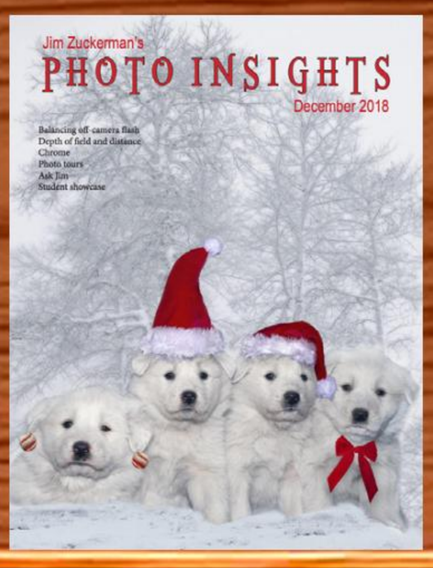
Oct. '18



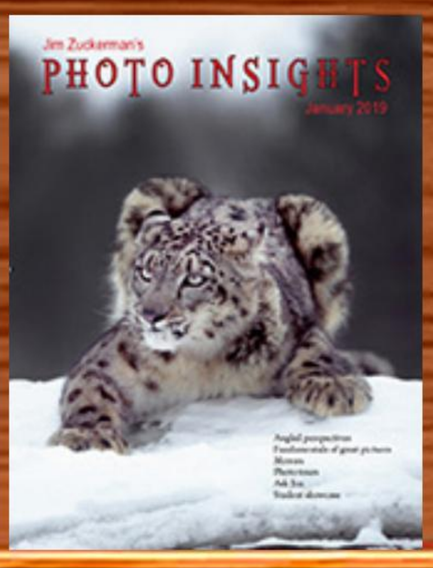
Nov. '18



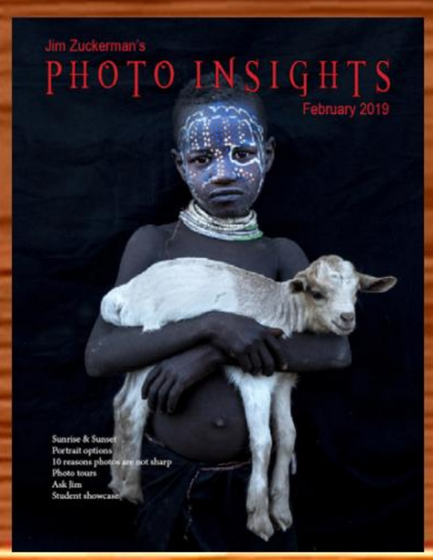
Dec. '18



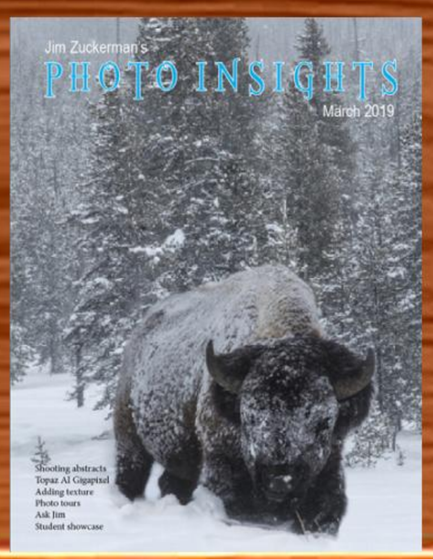
Jan. '19



Feb. '19

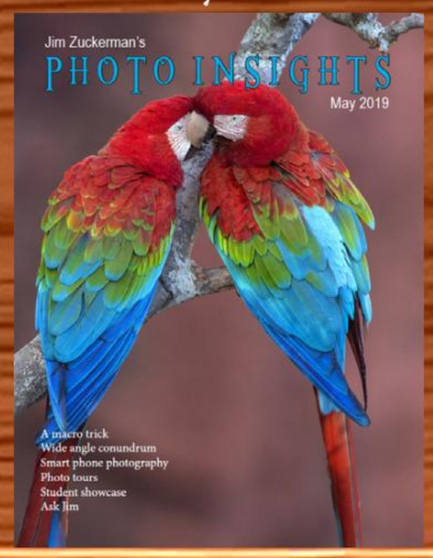


Mar. '19

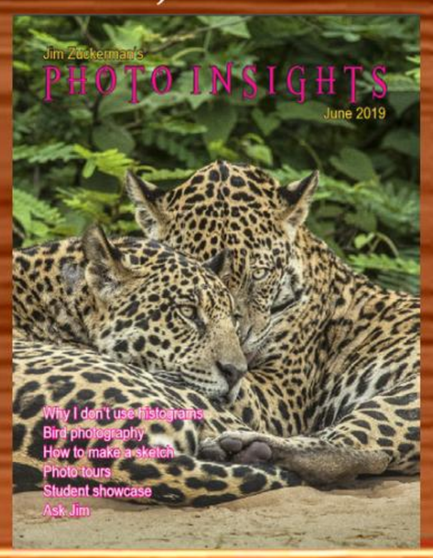


Apr. '19

May '19



Jun '19



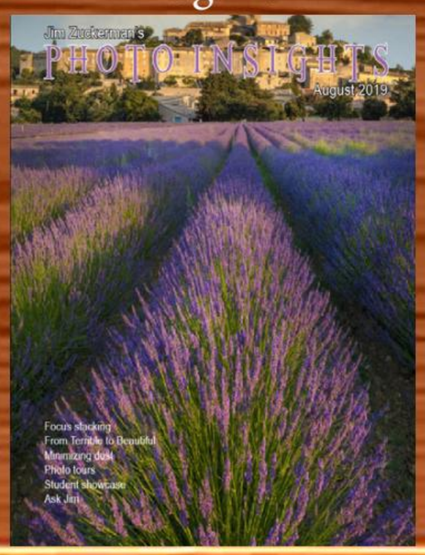
Click on the past issues of

PHOTO INSIGHTS

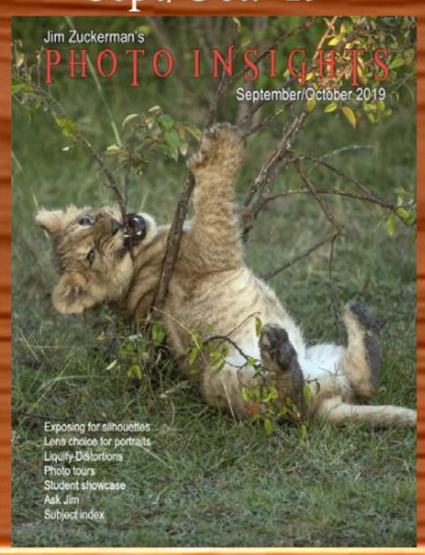
you would like to read.

Jul. '19

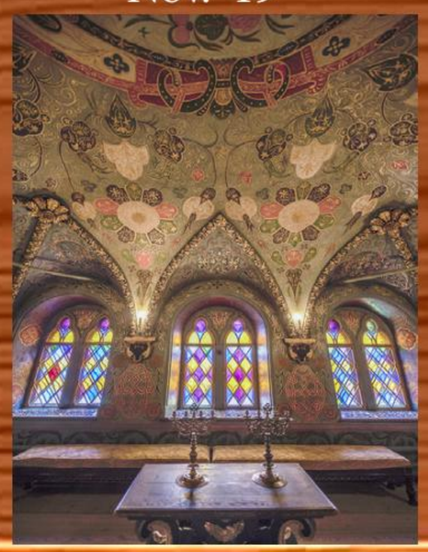
Aug. '19



Sept/Oct. '19

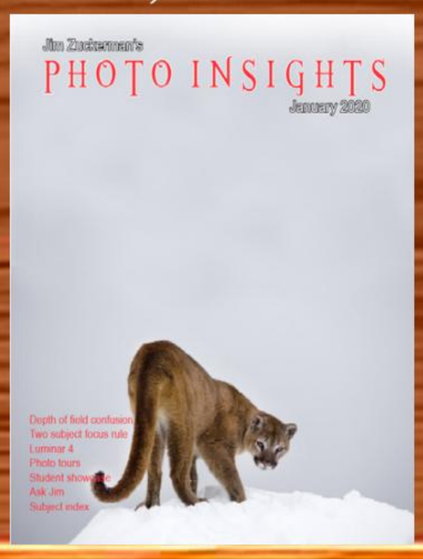


Nov. '19

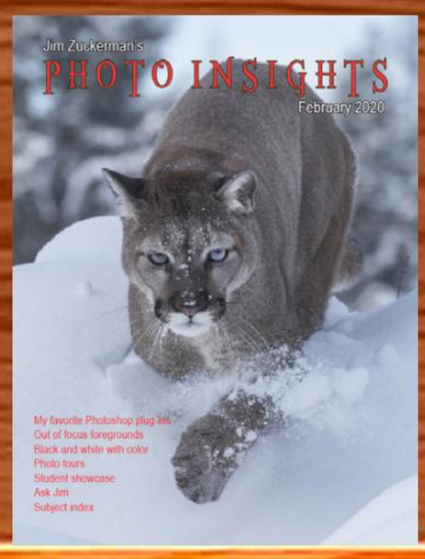


Dec. '19

Jan. '20

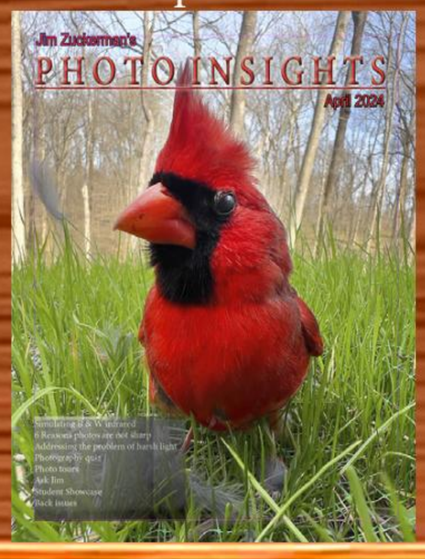


Feb. '20

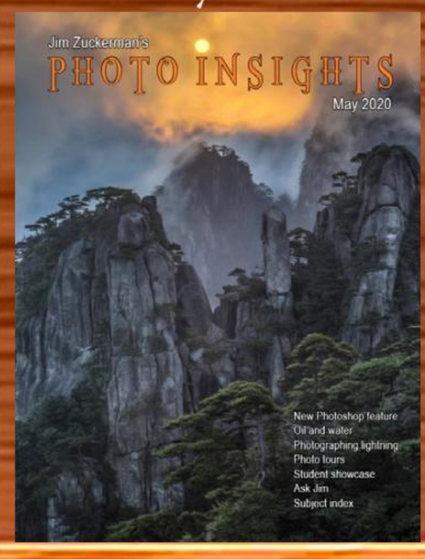


Mar. '20

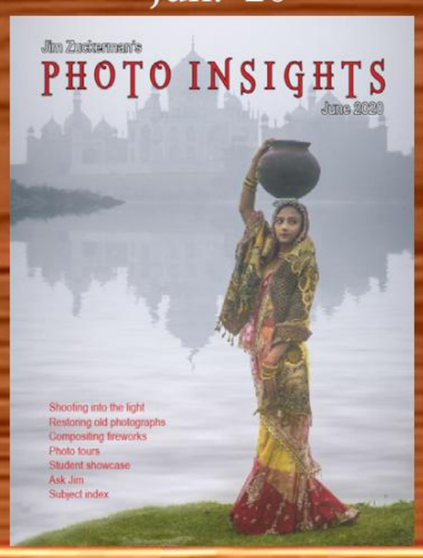
Apr. '20



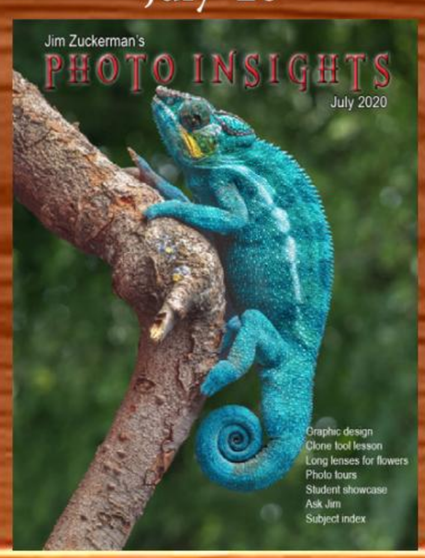
May '20



Jun. '20



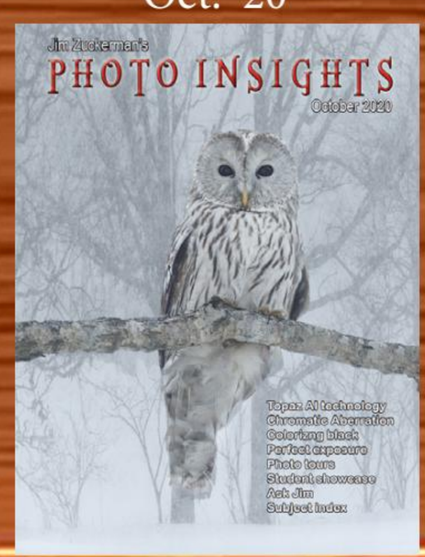
July '20



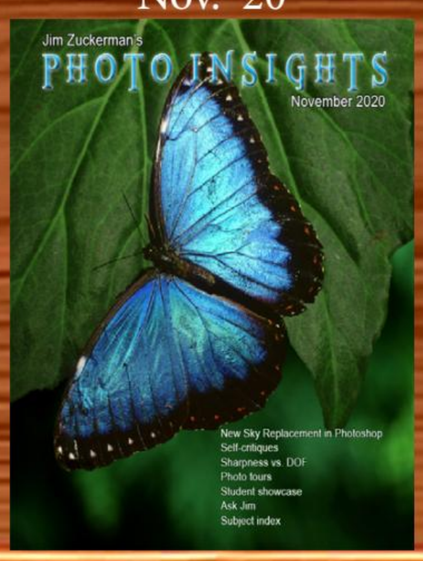
Aug. '20

Sept. '20

Oct. '20



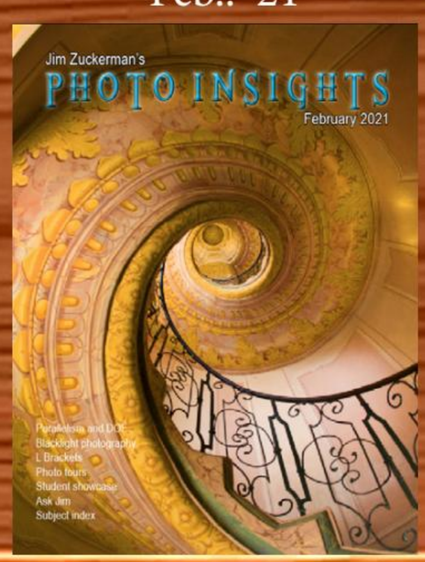
Nov. '20



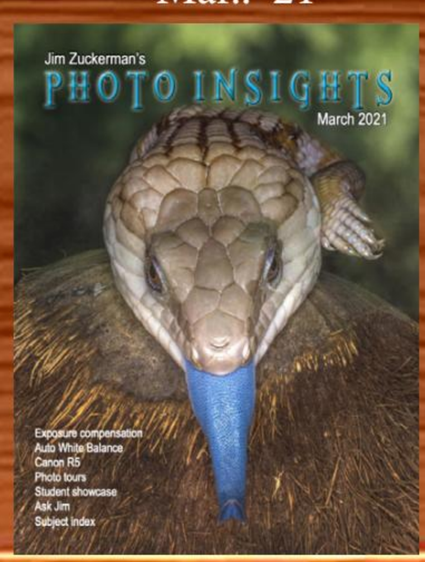
Dec. '20

Jan.. '21

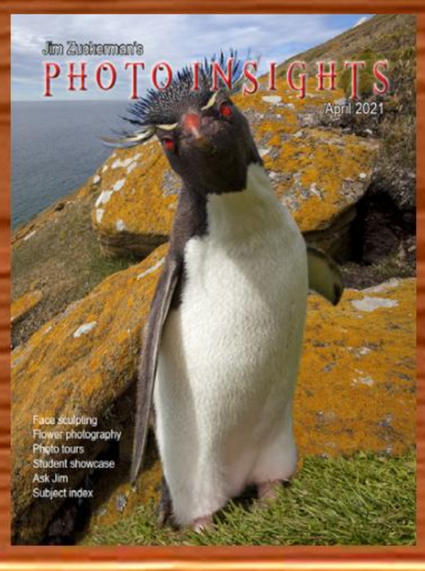
Feb.. '21



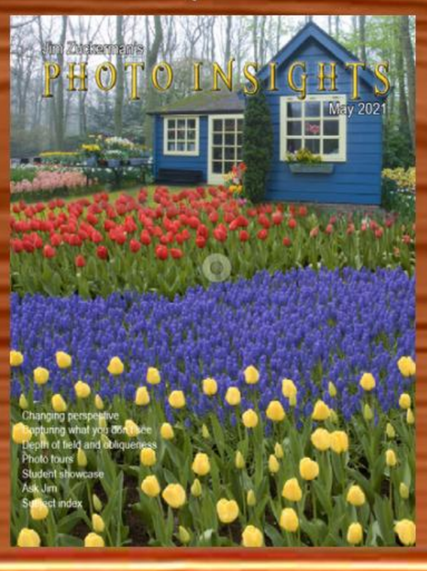
Mar.. '21



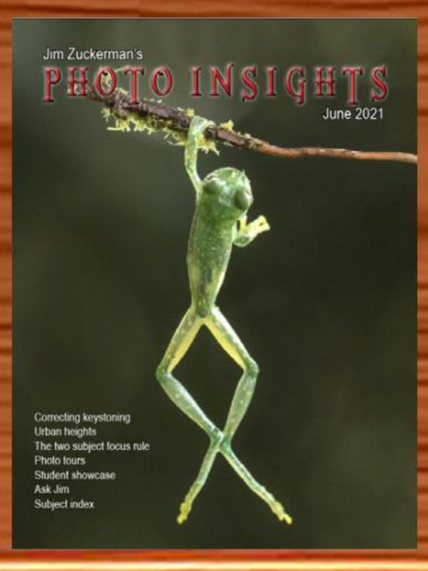
Apr.. ‘21



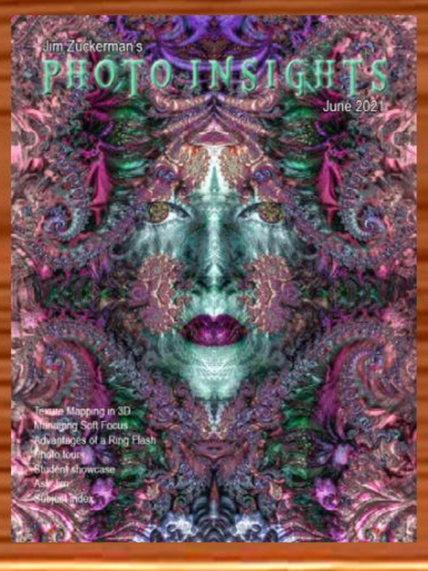
May ‘21



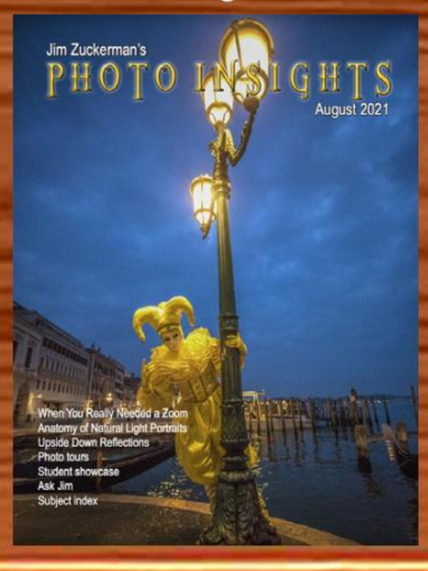
Jun.‘21



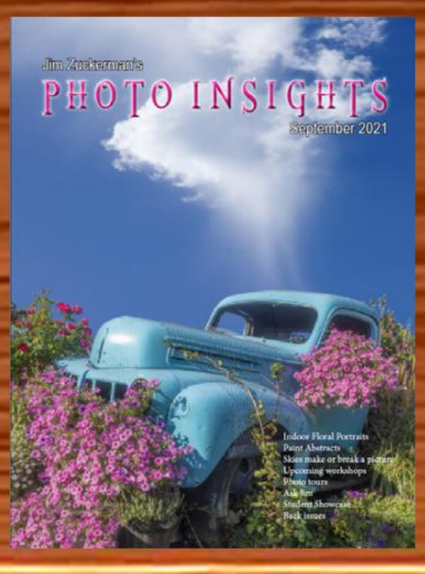
Jul.‘21



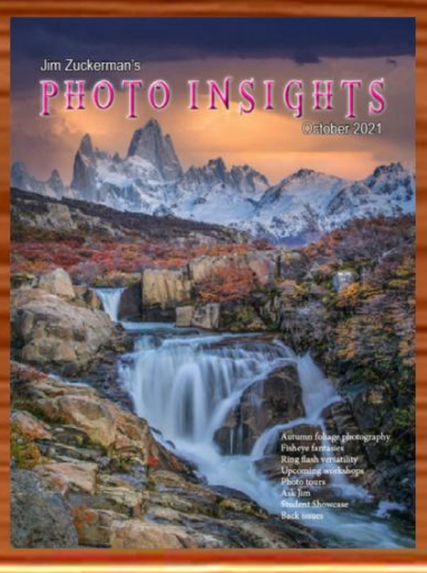
Aug.‘21



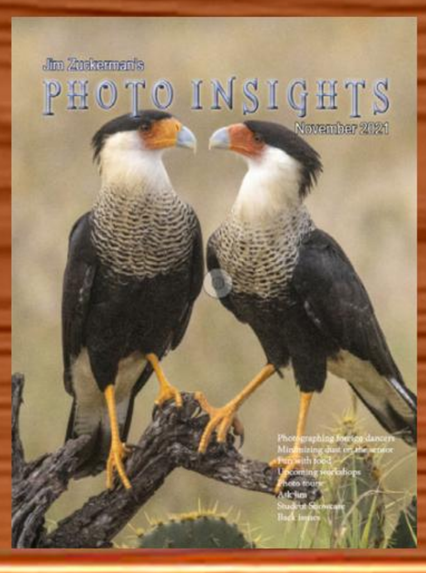
Sept. ‘21



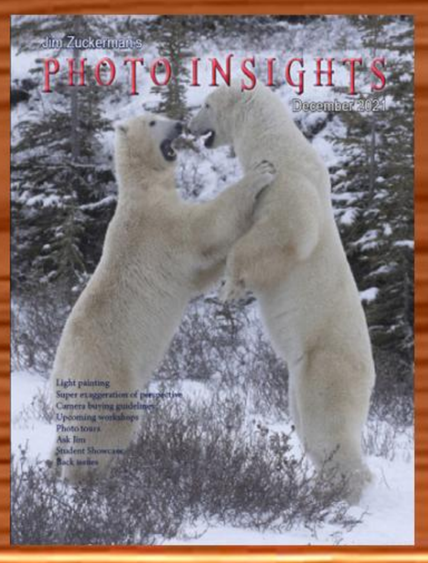
Oct. ‘21



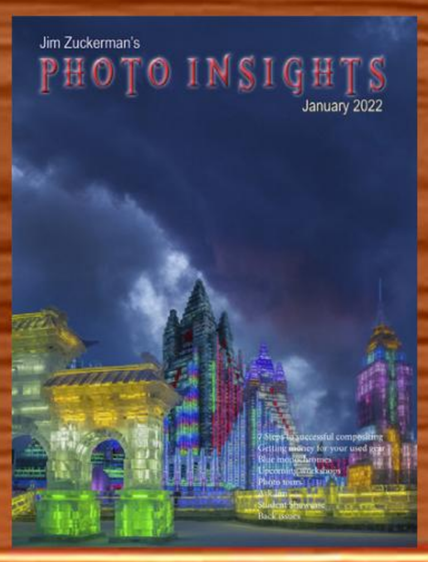
Nov. ‘21



Dec. ‘21

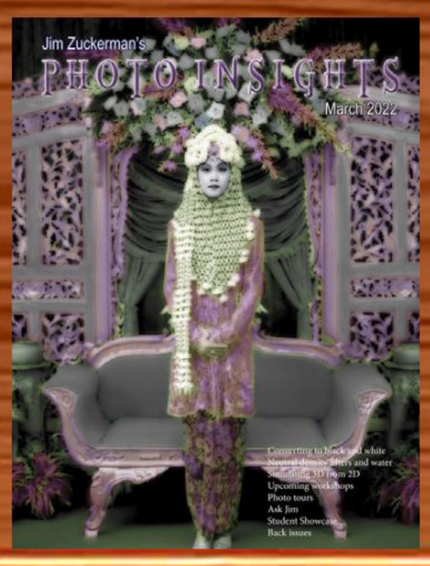


Jan. ‘22

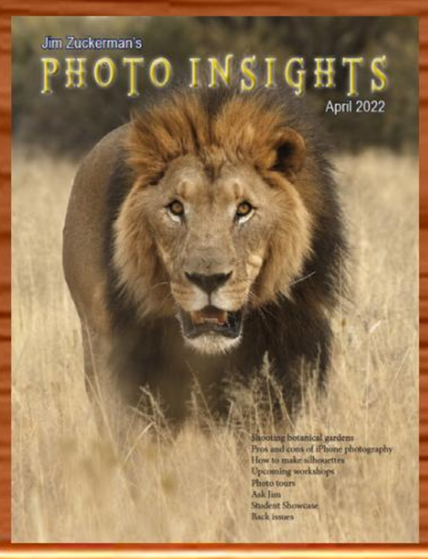


Feb. ‘22

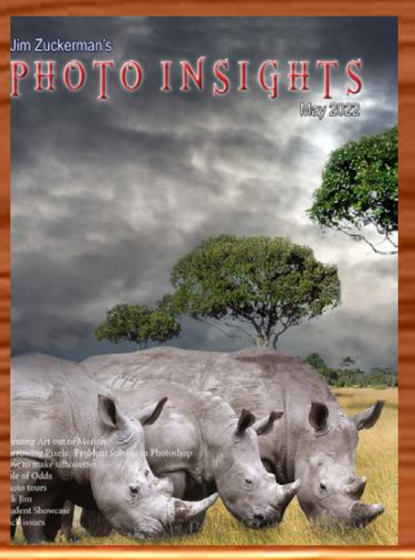
Mar. ‘22



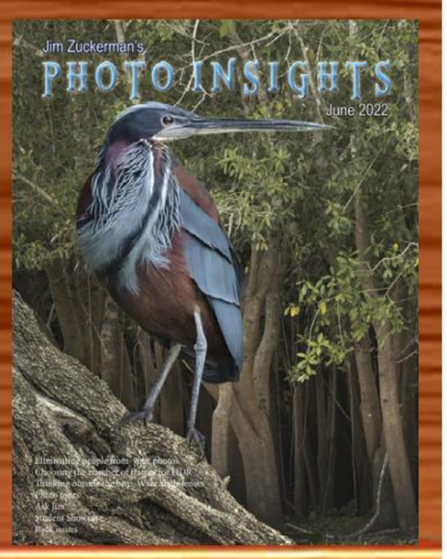
Apr. ‘22



May ‘22

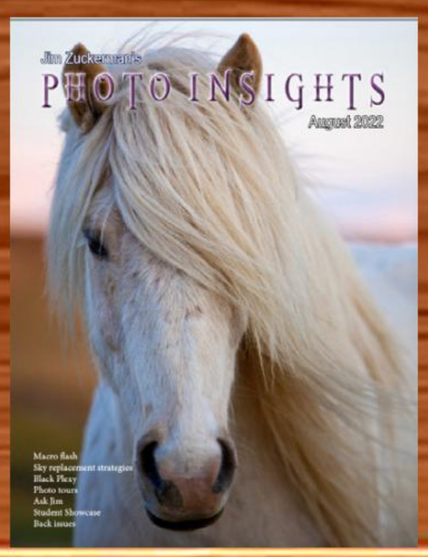


Jun. ‘22



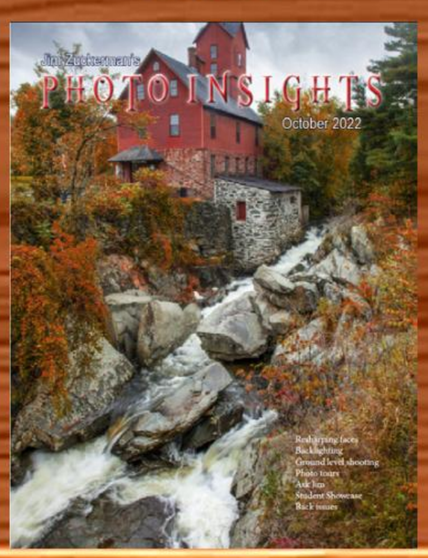
Jul. ‘22

Aug. ‘22



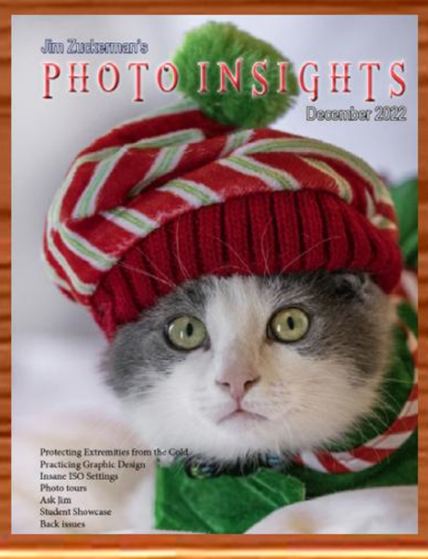
Sept. ‘22

Oct. ‘22



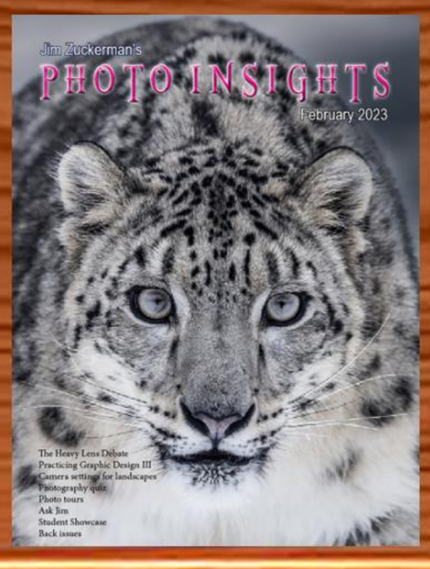
Nov. ‘22

Dec. ‘22



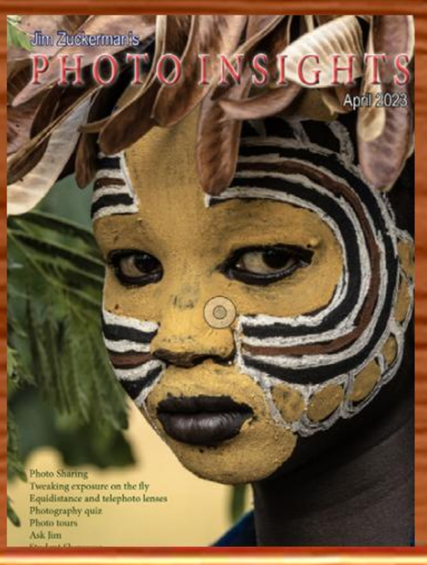
Jan. ‘23

Feb. ‘23



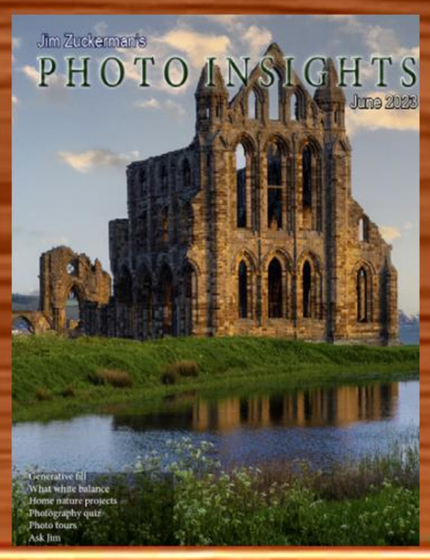
Mar. ‘23

Apr. ‘23



May ‘23

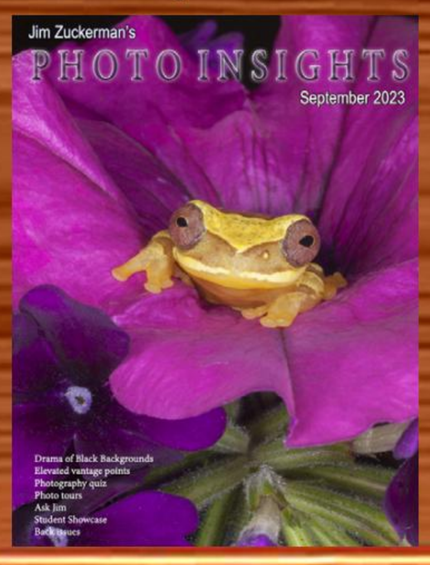
Jun. ‘23



Jul. ‘23

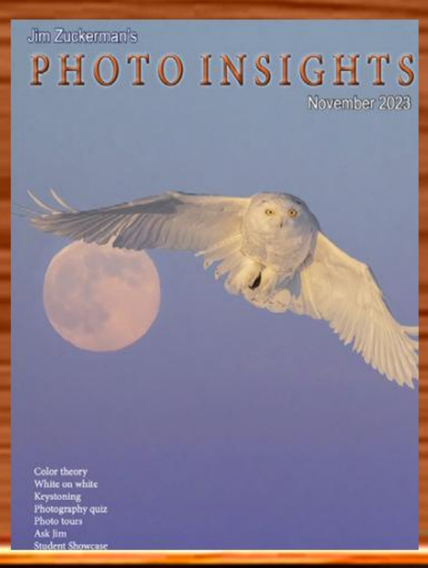
Aug. ‘23

Sept. ‘23



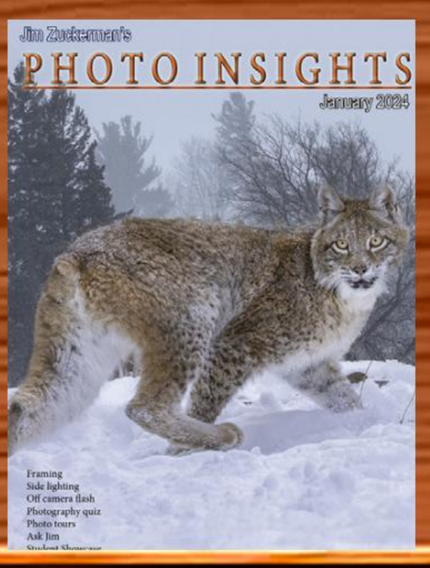
Oct. ‘23

Nov. ‘23



Dec. ‘23

Jan. ‘24



Feb.. ‘24

Mar. ‘24

Apr. ‘24

Subject index for past Photo Insight issues

1/3 focus law	Jul. ‘15
3D sphere	Mar. ‘16
90 degree finder	Mar. ‘13
Abstracts in soap	Feb. ‘15
Abstracts, Shooting	Mar ‘19
Aerial photography	Jun. ‘13
Aerial photography	Jan. ‘21
African safari	May ‘16
AI plus Photograpjhy	Oct. ‘23
Airplane windows	Mar. ‘16
Alien landscapes	Jan. ‘13
Anatomy of 8 photographs	Jan. ‘16
Anatomy of an Action Shot	Feb. ‘24
Angled perspectives	Jan. ‘19
Aperture vs. shutter speed	May ‘14
Aperture priority	Sept. ‘14
Aurora Borealis	Apr. ‘17
Auto white balance	Dec. ‘13
Autofocus, when it fails	Apr. ‘15
Autofocus failure	Aug. ‘15
Autofocus failure	Jan. ‘17
Autofocus challenges	Apr. ‘18
Auto ISO	Nov ‘17
Auto White Balance	Mar’ ‘21
Autumn Foliage	Sep. ‘18
Autumn Color	Sep. ‘20
Autumn foliage photography	Oct. ‘21
Back button focus	Oct. ‘18
Backgrounds, wild	Nov. ‘12
Backgrounds, busy	Apr. ‘13
Backlighting	Apr. ‘16
Backlighting	Oct. ‘22
Birds in flight	Aug. ‘13
Birds in flight	Jan. ‘14
Birefringence	May ‘18
Birds in flight	Mar. ‘16
Birds in flight, camera settings	Jan. ‘23
Bird Photography	Jun ‘19
Black backgrounds	Aug. ‘23
Blacklight photography	Feb. ‘21
Black velvet	Mar. ‘14
Black and white conversions	Mar. ‘17
Black and white infrared	Apr. ‘24
Black and white solarization	Sep. ‘17
Black and white with color	Jan. ‘20
Black and white plus color	Mar. ‘23
Blown highlights	Feb. ‘18
Blue monochromes	Jan. ‘22
Black Plexy	Aug. ‘22
Blur, field	Nov. ‘18
Blur technique	Oct. ‘17
Bokeh	Jun. ‘15
Botanical gardens, shooting	Apr. ‘22
Butterfly photography	Jul. ‘14
Camera buying guidelines	Dec. 21
Camera settings for landscapes	Feb. ‘23
Camera setting priorities	Jun. ‘17
Canon R5	Mar. ‘21
Capturing lightning	Jun. ‘13
Capturing what you don’t see	May ‘21
Catchlights	Jul. ‘16
Changing perspective	May ‘21
Cheap flash stand	Apr. ‘13
Children photography	Jun. ‘14
Choosing a telephoto lens	Dec. ‘20
Chromatic aberration	May ‘13
Chrome	Dec. ‘18
Cityscapes	Aug. ‘14
Cityscapes	May ‘16
Clone tool, fixing an issue	Sep. ‘17
Clone tool technique	Jul. ‘20
Color theory	Nov. ‘23
Composites and Light	Dec. ‘17
Compositing images	Apr. ‘19
Compositing, 7 steps	Jan. 22
Composition, different approach	Jan. ‘15
Content-aware, New	Aug. ‘20
Content aware move tool	Jan. ‘23
Contrast vs. exposure	Jul. ‘15
Converting to black and white	Mar. ‘22
Correcting keystoning	Jun. ‘21
Creating a star field	Jan. ‘14
Creating Art out of Motion	May ‘22
Creating a Sketch	Dec. ‘17
Creative blurs	Jan. ‘14
Custom functions	Jul. ‘23t
Dark backgrounds	Nov. ‘19
Dawn photography	Jan. ‘17
Dawn photography	Feb. ‘17
Dead center	Jan. ‘13
Dead center	Oct. ‘23
Dealing with smog	Oct. ‘16
Decay photography	Sep. ‘15
Define Pattern	Sep. ‘18
Depth of field	Aug. ‘16
Depth of field confusion	Jan. ‘20
Depth of field and distance	Dec. ‘18
Depth of field and obliqueness	May ‘21
Depth of field, shallow	Apr. ‘20
Depth of field vs. sharpness	Nov. ‘20
Double takes	Apr. ‘20
Drone photography	Mar. ‘23
Drop shadows	Apr. ‘19
Dust, Minimizing	Aug. ‘19
eBook, how to make	Jan. ‘13
Elevated vantage points	Aug. ‘23
Eliminating people from photos	Jun. ‘22
Embedded in Ice	Oct. 17
Energy saving bulbs	Sep. ‘14
Equidistance and telephoto lenses	Apri. ‘23
Exploring the power visuals of AI	Mar. ‘23
Exposing for the sun	Sep. ‘16
Exposure, the sun	Jul. ‘13
Exposure technique	Sep. ‘13
Exposure, snow	Jan. ‘14
Exposure triangle	Nov. ‘14
Exposure, to the right	Apr. ‘15
Exposure compensation	Sep. ‘16
Exposure compensation	Mar. ‘21
Extension tubes	Dec. ‘13
Extension tubes	Jul. ‘23
Face sculpting	Apr. ‘21
Face sculpting	Feb. ‘22
Festival photography	Sep. ‘20
Fill flash	Sep. ‘13
Filter forge	Feb. ‘13
Fireworks	Jul. ‘13
Fireworks, Compositing	Jun ‘20

Subject index for past Photo Insight issues

Fisheye lenses	May '13
Fisheye lenses	Feb. '15
Fisheye fantasies	Oct. 21
Flash backlighting	May '15
Flash, balancing exposure	Oct. '15
Flash, balancing off-camera	Dec. '18
Flat art	Sep. '16
Flexify 2	Mar. '20
Flood fixes problems	Nov. '19
Floral Portraits, Indoors	Aug. '21
Flowers	May '15
Flower photography	Apr '21
Flowers in harsh light	Jul. '16
Focus on the eyes	Dec. '20
Focus points	Mar. '15
Focus points	Sep. '20
Focus stacking	Mar. '17
Focus stacking	Aug. '19
Focusing in the dark	Oct. '16
Foreign Dancers, Photographing	Nov' 17
Foreign models	Jun. '13
Fractals, generating	Sep. '13
Fractals	Jul. '19
Framing	May '17
Framing	Jan. '24
Freezing ultra action	May '17
From Terrible to Beautiful	Aug. '19
Fun with paint	Oct. '16
Fundamental ingredients	Apr. '13
Fundamentals That Make Great Photos	Jan. '19
Fun With Christmas Lights	Jan. '21
Fun with Food	
Graphic Design	Jul. '20
Garish imagery	Dec. '15
Generative fill	Jun. '23
Getting money for used gear	Jan.' 22
Getting the blues out	Dec. '23
Great subjects	Apr. '15
Great ceilings & HDR Panos	Jul. '19
Green screen	Mar. '13
Ground level shooting	Oct. '22
Grunge technique	Feb. '13
Harsh light, the problem of	Apr. '24
Heavy Lens Debate, The	Feb. '23
HDR, one photo	Apr. '13
HDR at twilight	May '13
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	Jun. '23
Hotels with a view	Mar. '20
Humidity	Oct. '13
Hummingbird photography	Apr. '13
Hyperfocal distance	Jul. '13
Image resizing	Aug. '18
Implying motion	Sept.'14
Impossible DOF	Feb. '16
Impossible DOF	Jan. '17
Indestructible camera bag	Dec. '14
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	Feb. '18
L Bracket	Feb. '21
Landscape photography	Dec. '12
Landscape photography	Apr. '14
Landscape photography	Nov. '16
Layer Masks, The Power of	Feb. '22
Lessons Learned from Extreme Cold	Feb. '24
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
Mannequin heads	Apr. '16
Metering modes	Nov. '16
Meters, How They Work	Jul. '18
Meters, when they fail	Dec. '16
Metering situations, Impossible	Jul. '19
Middle gray	Nov. '15
Milky Way, Shooting thet	
Minimizing dust on the sensor	Nov. '21
Mirrors	Jan. '19
Mirror images	May '23
Model shoot	Jan. '17
Moon glow	Oct. '16
Mosaics	Jun. '17
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
New depth of field preview	Mar. '24
New shooting style	Mar. '24

Subject index for past Photo Insight issues

Neutral Density filters and water	Mar. ‘22
Night photography	Feb. ‘14
Night Safaris	Jun. ‘18
Night to Twilight	Dec. ‘17
Noise reduction	Feb. ‘17
Off-camera flash	Jan. ‘24
Oil and water	May ‘20
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
Pano-Mirrors with a twist	Jan. ‘18
Parades	Sep. ‘13
Parallelism	Nov. ‘19
Parallelism and DOF	Feb. ‘21
Perspective, Super Exaggeration of	Dec. ‘21
Photo shsaring	Apr. ‘23
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
Photoshop, replace background	Apr. ‘13
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
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	May ‘23
Predictive Focus	Sep. ‘18
Problem/solution	Apr. ‘17
Problem Solving in Photoshop	May ‘22
Problem with cruises	Jan. ‘18
Protecting extremeities from the cold	Dec. ‘22
Protecting highlights	Dec. ‘12
Puppies	Jan. ‘15
Puppy photography	Feb. ’18
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
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
Self-critiques	Nov. ‘20
Sensor cleaning	Jun. ‘18
Sepia and dark contrast	Jun. ‘15
Sepia, Traditional look of	
Shade	May ‘14
Shady side	Jun. ‘18
Shadows define the shot	Dec. ‘23
Shadows, Paying Attention to	Mar. ‘18
Sharp, 6 reasons why photos are not	Apr. ‘24
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

Subject index for past Photo Insight issues

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	Mar. ‘17
Star photography	
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
Total solar eclipse, How to shoot	Mar. ‘24
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
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

Quiz answers

1. b
2. d
3. c
4. c
5. d
6. c
7. b
8. b
9. a
10. d

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

Subject index for past Photo Insight issues

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 light portraits	Feb. ‘24
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

An ocelot lit by artificial lighting in the Pantanal.

PHOTO INSIGHTS
published monthly by Jim Zuckerman

All rights reserved
© Jim Zuckerman 2024

email:
photos@jimzuckerman.com

Edited by Donald Moore