

Club News

April Meeting

- Tuesday, 4/5/22 6:30 pm at St. Stephen's Church!

Note: Masks are required, and everyone must sign a COVID-19 liability waiver to attend (the form will be available at the meeting)

- Program: "Pinhole Photography" by Keith Kotay
- Famous Photographer Profile: André Kertész
- Digital Competition—
 - March digital competition results & image critique
 - April digital competition image preview
 - Assigned Subject: Glass

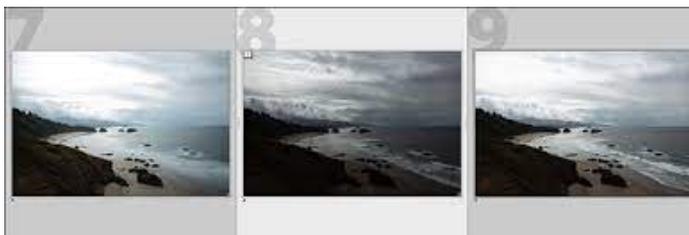
Educational Photo Series-Bracketing

Bracketing is a powerful photographic technique – but what does it achieve and when should you use it?

Bottom line: If you've heard about bracketing but aren't sure what it does, or you're an experienced photographer simply looking for high-level guidance, you've come to the right place.

What is bracketing? Bracketing is a camera technique where you capture several different exposures of the same scene. In other words, you capture a standard image, a darker/underexposed version, and a brighter/overexposed version):

Each composition is identical, yet the exposure level varies from shot to shot. Generally, this is done on a tripod to prevent camera movement between images, but there are also photographers who bracket handheld.



Note that bracketing most commonly occurs in groups of three. However, this isn't a requirement; some situations need only two images, while others call for five images, seven images, nine images, or even more. It depends on your exposure skills and the scene itself.

Why is bracketing useful? At its simplest, bracketing increases your odds of nailing a difficult exposure.

Every modern camera is equipped with a meter, which analyzes a scene and determines the proper exposure settings for beautifully rendered detail. But while camera meters are powerful, they often get the exposure wrong. For instance, cameras characteristically overexpose (over-brighten) dark scenes (e.g., a nighttime image of a city skyline) and characteristically underexpose (over-darken) bright scenes (e.g., a stand of white aspen trees in snow).



2022 Assigned Subjects

- April - Glass
- May - Twisted and Tangled
- June - Water Drops on Petals
- September - Street Photography
- October - Water
- November - Barns

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Bracketing continued

When this happens, you can always make adjustments using Manual mode or exposure compensation – but unless you have lots of experience and an excellent mental exposure system, it's tough to know exactly how much to modify your camera settings for a good result.

Enter bracketing, where you take a series of differently exposed images. Sure, the first shot might be poorly exposed, but if you take three (or five, or seven) images, one is bound to look good. With a fastidious eye and a careful bracketing process, you can practically guarantee a nice exposure.

Bracketing in this way – that is, as insurance – is especially helpful when facing very bright or very dark scenes, as well as when photographing scenes with lots of tonal variation. Beginners may choose to bracket even in more standard exposure scenarios, just to be safe.

But there's a second reason to bracket your images, one that's very popular among landscape and cityscape photographers in particular: Bracketing lets you capture high dynamic range (HDR) photos.

Bracketing and high dynamic range photography The dynamic range of a scene refers to the difference between its lightest lights and its darkest darks.

A gray wall has a very low dynamic range, as it's full of mid-tones and little else. But a sunset – with a bright sky and a dark foreground – has a huge dynamic range, as does a white cat on a black background, a mound of snow against a black tree, and so on.

And camera sensors struggle to capture the entire tonal range of such scenes. When photographing a sunset, if you set your exposure for the midtones, you'll end up with detailless foreground shadows and detailless sky highlights.

But if you expose for the shadows, you'll lose detail in the highlights, and if you expose for the highlights, you'll lose detail in the shadows.

See the problem? Scenes that feature bright areas and dark areas can't be easily rendered by a camera sensor, no matter the exposure value. Fortunately, there's an easy solution:

Instead of capturing one image of the scene, you bracket.

And then you blend all of your bracketed images together in a post-processing program. That way, you can use the detailed highlights from one image, the detailed midtones from another image, and the detailed shadows from a third image. It doesn't matter if each individual shot is missing details at its extremes, because all the detail is present, just spread across the three images.

This may sound difficult, but it's really not. The bracketing process is the same as described in the previous sections. And post-processing programs often include an auto-merge feature, where you select several images and they quickly combine them together for the best (HDR) result.



While many scenes only require three bracketed shots – a standard shot, a light shot, and a dark shot – in extreme situations, you may want to use five, seven, or nine images instead. That's the hardest part about bracketing: deciding exactly how many images to capture!

Bracketing and camera settings Image exposure is determined by three variables: aperture, shutter speed, and ISO.

Adjust any of these variables, and you'll get an incrementally lighter or darker shot. But each variable will also affect your photo in other ways:

The aperture will affect the amount of the scene that is in focus, also known as the depth of field

The shutter speed will affect the sharpness of your image, especially when photographing moving subjects

The ISO will affect the noisiness, sometimes referred to as the graininess, of your image

So when bracketing, which variable should you target for adjustment?

In general, you should bracket using the shutter speed. If your subject is stationary and you're working with a tripod, you shouldn't have any issues increasing and decreasing your shutter speed, and you'll get the desired underexposure/overexposure effect.

However, if you need to keep your shutter speed at a particular value, you can bracket using ISO. Just know that the higher you boost your ISO, the worse your images will look, so be very careful before pushing your ISO to significant heights.

How to bracket your photos: a step-by-step process

Step 1: Select Manual mode or Aperture Priority mode

Bracketing only works if you have control over your camera settings, which is why bracketing in Auto



Bracketing continued

mode is a bad idea (and is impossible on most cameras, anyway). Instead, you need to set your camera to Manual mode, which will let you individually set your aperture, shutter speed, and ISO, or Aperture Priority mode, which will let you set the aperture and ISO while the camera sets the shutter speed.

(Why not Shutter Priority mode? You can bracket using this mode, but it works by adjusting the aperture, which is rarely ideal.)

Step 2: Take a photo using your camera's recommended exposure settings

If you're using Aperture Priority mode, set your preferred aperture and ISO, then let your camera select a corresponding shutter speed.

If you're using Manual mode, set your three exposure variables so the exposure bar lines up at the zero mark in the viewfinder.

Note that if you know your camera is likely to underexpose or overexpose the scene, feel free to adjust your initial exposure to compensate. So if you believe your camera is going to underexpose a snow scene, you could decrease the shutter speed slightly (in Manual mode, you'll need to turn the shutter speed dial, while in Aperture Priority mode, you'll need to apply positive exposure compensation).

Otherwise, just use your camera's recommended settings. Then take a shot.

Step 3: Take an "overexposed" and an "underexposed" bracketed photo

Next, you need to take your lighter and darker images.

In Manual mode, simply decrease your shutter speed by a full stop (generally three increments on the shutter speed dial) for the overexposed image. Then increase your shutter speed by a full stop for the underexposed image.

In Aperture Priority mode, simply dial in +1 exposure compensation for the overexposed image, then dial in -1 exposure compensation for the underexposed image. This will automatically adjust your shutter speed in either direction.

By the way, feel free to experiment with the bracketing increments. If you're bracketing for insurance, a stop (i.e., +1/-1) in either direction is often safe. But if you're dealing with high dynamic range scenes, two stops might be the better option.

Step 4: Take any additional photos

At this point, you'll want to observe your scene. You might also check the histogram for the photos you've already taken and look for any spots of overexposure (highlight clipping) in the darkest image and underexposure (shadow clipping) in the lightest image.

If your scene has a significant dynamic range not fully captured



Photo Contests

• Weekly Photo Challenge:

- <https://www.facebook.com/groups/weeklyphotographychallenges>

Various Photo Contests (Many Different Topics)

- <https://www.photocontestinsider.com/>
- <https://photocontestguru.com>
- <http://www.voubs.com>
- www.greatamericanphotocontest.com
- www.viewbug.com/photo-contests
- <https://www.outdoorphotographer.com/photo-contests/>
- <http://www.photocrowd.com>
- <https://www.fanartreview.com>

Landscape and Nature Forum Photography Challenge—monthly theme and critique: [Click here](#)

PSA Events

- **PJ Story Book Competition—The Photojournalism Division is hosting a digital Story Book Competition! Beginning June 1st,** <https://psa-photo.org/index.php?divisions-photojournalism-photo-story-competition> [for instructions](#)

Bracketing continued

by your series of bracketed shots, go ahead and capture additional images at +2/-2 stops, +3/-3 stops, and so on, until you're satisfied.

Otherwise, consider your bracketing sequence finished, and head on to your next subject!

Auto Exposure Bracketing If you become a frequent bracketer, or you simply wish to simplify the process, modern cameras do tend to offer an Automatic Exposure Bracketing (AEB) setting.

You simply dial in the number of bracketed shots you need, indicate an increment (e.g., two stops), then fire off several images. Your camera will automatically adjust the exposure settings so you get a series of bracketed files.

Unfortunately, Auto Exposure Bracketing doesn't work in Manual mode, so you'll need to use Aperture Priority instead.

When should you bracket your images? Bracketing is a great technique, but you don't need to do it all the time – and in certain situations, it can be harmful rather than helpful.

First, if you're shooting any type of high dynamic range scene, whether or not you plan to blend the images in post-processing, I highly recommend you bracket. It'll ensure you nail the exposure, and when it comes to HDR scenes, a perfect exposure is critical. In particular, bracket your sunrise and sunset landscape shots, as well as any cityscape shots taken at sunrise, sunset, or at night.

Second, if you're capturing an unusually dark or an unusually light scene, it pays to bracket, because your camera often gets the exposure wrong. You should shoot from a tripod for the most consistent results, but if you prefer to shoot handheld, that's okay, too. Yes, it'll make HDR blending more difficult, but if you're bracketing for insurance, that shouldn't matter.

In fact, if your subject is moving, then handheld bracketing is often the way to go. You can bracket shots of a bird foraging, for instance, and while the bracketed series won't look identical, you'll end up with at least one usable shot.

Finally, if you've encountered a scene and you desperately want to get the exposure right (e.g., it's a once-in-a-lifetime sky, for instance), then just bracket. It's the safest way to ensure you get a good shot.

On the other hand, try to avoid bracketing if you're faced with a standard low dynamic range scene and fast-moving subjects. You'll spend so much time trying to bracket that you may miss key opportunities, and the bracketing probably won't make much difference, anyway.

Processing bracketed shots for HDR imaging The ins and outs of high dynamic range blending are beyond the scope of this article. But if you've captured a series of images with sufficient overall detail, you'll generally get a great HDR result in Lightroom. Here's how it works:

Import all your bracketed images, then select the entire series in the filmstrip.

Right-click and select Photo Merge>HDR.

Lightroom will do all the blending, and you'll end up with a beautiful HDR image!

If you need more control over the blending process, you can always purchase a dedicated HDR program, like Photomatix or Aurora HDR.

Alternatively, you can blend your images manually in Photoshop using luminosity masks; it's a very involved process, but one favored by some landscape photographers.

Now that you've finished this article, you know what bracketing is all about – and you know how and when to use it.

So go out with your camera and practice. Find some high dynamic range scenes, do some bracketing, and process the results. Alternatively, capture some very light or very dark scenes, then see how bracketing helps ensure you get a good exposure!

Source: <https://digital-photography-school.com/bracketing-what-is-it-and-what-to-do-with-the-images/>

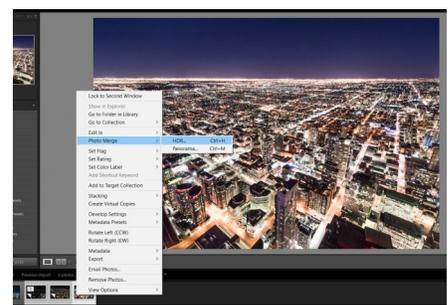


Photo Opportunities

April 8-10 Cherry Blossom Festival, Philadelphia
<https://japanphilly.org/programs/festivals/cherryblossom/>

April 13-17 Kennel Club “Blue & Gray Cluster” Dog Show
 Farm Show Complex, Harrisburg
www.hkc.org

April 22 Spring Events at Hawk Mountain
hawkmountain.org/events

4th Friday of each month Cruise Night
 Markets at Shrewsbury
<https://www.marketsatshrewsbury.com/events/cruise-night/>

May 2 Go Fly a Kite Day
 Berks County Youth Recreation Facility
<http://www.co.berks.pa.us/Dept/Parks/Pages/KiteDay.aspx>

Photo Idea Calendar



April



Bokeh 1	Table 2	Favorite Time of Day 3	Cereal 4	Next to You 5	Comfort 6	Games 7
Golden 8	Your Neighbourhood 9	Outside  10	Hair 11	Small 12	Date Night 13	Peaches 14
Periwinkle  15	Refreshing 16	Spoon 17	Lines 18	Food 19	Sidewalk 20	Easter Eggs 21
Earth Day  22	A is for... 23	Nature 24	Favorite Flower 25	Potato 26	Kids 27	Handwriting  28
Graffiti 29	Kiss 30					

Workshops

Apogee Photo Magazine
 For more information log on to
http://www.apogeephoto.com/photography_workshops.shtml

Wildlife and Nature Travel
www.wildlifeandnaturetravel.com

Art Wolfe Photography Workshops
www.artwolfworkshops.com

Don Smith Photography
www.donsmithphotography.com

Brenda Tharp
www.brendatharp.com/

M&M Photo Tours
<http://www.mmphototours.com/>

Arizona Highway Photo Workshops
<http://www.friendsofhighways.com/>

John Shaw 2-Day Nature & Digital Photography Seminar
<http://www.photosafaris.com/>

Jack Graham Photography
<http://jackgrahamphoto.com/>

Rocky Mountain Reflections
www.rockymtnrefl.com/photographyworkshops.html

Slonina Photography—Explore Wild America
<http://www.sphotography.com>

Photo Workshop Adventures
www.photoworkshopadventures.com

Michael Francis Photo Shoots
www.michaelfrancisphoto.com

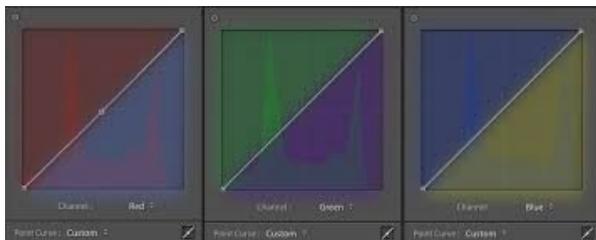
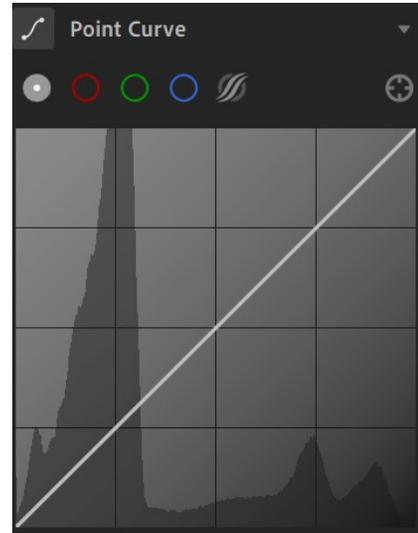
Osprey Photo Workshops & Tours
www.ospreyphoto.com

Horizon Photography Workshops
www.horizonworkshops.com

Photo Editing Feature— How to Use the Tone Curve

The tone curve is a **tool in Lightroom** used for **adjusting tones to make images brighter or darker, and to adjust colors**. Tones, from shadows, to darks, mid-tones, lights and highlights are adjusted using the RGB curve. Colors are adjusted using the separate red, blue and green curves.

How to use the tone curve: <https://www.youtube.com/watch?v=WPv505BDD7I>



Random Idea of the Month– Lightbox

A photo lightbox — also known as a light tent — is a box with translucent sides and a white backdrop. The box is intended to be empty so that you can place a product inside, take a photo, and get a result that has professional-quality lighting, with no shadows disrupting the plain, even background.

How to Use a Lightbox: <https://www.youtube.com/watch?v=ZKiqFwYDyps>

How to Make a Lightbox: <https://www.youtube.com/watch?v=ohEP6I6Q7sk>

Top 5 Lightboxes to Purchase: <https://www.youtube.com/watch?v=rOdVQsdsigg>



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Webmaster: Tom Gainer, tom_gainer@comcast.net

Meetings are the first Tuesday of each month!

If you would like to do a program on anything digital related or know someone who would, please let us know.

Or

If you have something of interest for our members, please email them to the Newsletter Editor, Connie at Lebanon-camera@gmail.com.

Everyone is invited to attend our regular monthly meetings.

Unless otherwise noted we meet the first Tuesday at 6:30PM in St. Stephen's Christian Fellowship Church, 1100 Hunter Chase Lane, Lebanon PA.

The club is a member of the Photographic Society of American (PSA).

Cancellation or last minute changes of events will normally be sent to members via email and broadcast on radio station WLBR, AM 1270.

Only members may enter competitions. Dues are \$25 per year and include the newsletter and monthly meeting minutes.

Digital Competition entries are due at least one day prior to the scheduled competition.

Competition Committee will keep winning Print entries for the end of year competition unless the member requests return of entries before then. In that case, the member would be responsible for re-submitting them for the end of year competition.

Directions: From Rt 72 N of Lebanon where N 12th St becomes Jonestown Road at the McDonalds, follow Jonestown Road north past the Turkey Hill. Jonestown Road will become Sandhill Road. Keep on Sandhill road until it branches to the left into Grace Avenue. Church is on the left 3/10 of a mile from the split *before* you pass Youth for Christ and Fisher Bus.

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Microsoft Corporation, the club, or as marked.

Dates and times of events may change. Please check local listings.

**Below are links of
online pdf files from
past workshops and
monthly meeting
presentations:**

[http://
www.lebanoncameraclub.org/
newsletters](http://www.lebanoncameraclub.org/newsletters)

[https://
www.lebanoncameraclub.org/links](https://www.lebanoncameraclub.org/links)