



LEARN TO THINK

LEARN TO SEE

LEARN TO CREATE

[CLICK for our 2022 PHOTO WORKSHOPS](#)

COMMON WORKSHOP FAQ'S

This document will offer some general information on our workshops that we know you are interested to know. After registration we will be sending out specific information on that individual workshop followed by updates as we get close to our workshop date. We have mentioned gear we use. You do not need to duplicate these products to have a successful workshop. However, experience has taught us that having such gear, or the equivalent, helps.

Group size

One of the most frequently asked questions is about the size of our groups. We offer no more than a six (sometimes less) attendee to leader ratio. This allows us to provide plenty of individual attention both in the field and in our classroom. Many workshops allow more clients; however, we strictly adhere to these minimums to insure your best overall experience.

Fitness /Workshop Difficulty

We will inform you on the fitness level of our workshops. We will also inform you of the terrain, altitude, or other issues if necessary, so that you are aware of any potential issues you may have before arriving.

Easy: Most photography is from within several hundred yards to as much as a ¼- 1/2 mile or so from our vehicles. The terrain is usually level but could be a bit uneven and getting to our locations (up/downhill) have minimal elevation change.

Moderate: You may have to walk a mile or two miles, sometimes on uneven ground, with moderate elevation gain. You may need to walk through ice, sand, or soft, marshy ground.

Very few of our workshops feature difficult or particularly challenging hikes. If so, you will know this beforehand.

Know your camera

“Practice does not make perfect. Only perfect practice makes perfect” ...

Vince Lombardi



You do not need to travel the world to understand your camera's functions and capabilities. You can go online, read your manual and practice in your own living room and backyard.

In each individual workshop description, you will receive after registration, we will go into detail about aspects specific to the individual workshop. This is to help you be even better prepared. We will inform you on the topics we will cover in the field and in the classroom as well. However, having a good foundation and understanding of some simple concepts prior to arriving to our workshop, will make your time with us much more rewarding. You have already made an investment in choosing to travel to the workshop, so please make one more investment and take a little time to prepare for the workshop as to get the best return on your investment.

You should be comfortable with the following concepts of your camera(s), lenses, accessories, and more:

> Be able to select the **aperture**, **shutter speed** and **ISO** values in the mode you like to use.

**REFER TO THE INFORMATION AT THE END OF THIS DOCUMENT
REGARDING YOUR UNDERSTANDING of the RELATIONSHIP BETWEEN
APERTURE, SHUTTER SPEED AND ISO**

> Be familiar and able to use **Manual, Aperture Priority, Shutter Priority and Bulb modes**, if possible and to be familiar on how to adjust exposure compensation. ***I HAVE INCLUDED BASIC INFORMATION ON THIS SUBJECT AT THE END OF THIS DOCUMENT! PLEASE GIVE IT A GOOD READ.***

> Understand how your **camera focuses**, both in manual and automatically, using focus points from multipoint to single point and know how to adjust focus either in through the viewfinder or in live view.

> Change the **focus method** from single shot to continuous, and from auto focus to manual focus.

> Understand your **histogram**

> Be familiar with some of the **important and useful features** in most cameras such as the electronic level/virtual horizon and gridlines in live view, focus peaking, using a self-timer (useful to reduce camera shake if you do not have a cable release)

It is a good idea to download your camera owner's manual (in PDF FORM)

and store it on your smartphone or Tablet

IMAGE REVIEWS: Most attendees who have been with us over the years have consistently remarked on how important these reviews were to the workshop. Almost without exception, we will take time each day to review some of our work. Please bring a laptop and thumb drive to allow you to transfer files for review

What do we cover in the field and classroom?

We stress the “Why” of things along with the “How To” of photography. Every image should tell a story and convey emotion. When we use our eyes and inner emotion together, we have the potential to make a powerful image. In the field we emphasize slowing down, defining the subject, and deciding how to tell the story using your camera. We will work on “seeing” images and using the environment to aid in creating artistic imagery. We will discuss the need for foregrounds, leading lines, or patterns, etc. and how to handle these in different ways. We will stress simplicity and use all aspects, including depth of field, proper exposure, filter usage and more. All this will help you become a better “thinking” photographer and at the same time, return home with some wonderful images from unforgettable locations. The following (and not in any order) are just some of the many things we will bring attention to during our time together.

- Improving your technical and visionary photographic skills within these “hands-on” workshops
- Developing your skills in finding, seeing, and creating your image
- Making images that allow the viewer to quickly define the subject and understand the story you are trying to convey
- Working the scene and area, not just taking a photograph, and moving to the next possible location
- Composition, exposure, and other essential elements needed to bring out the story within the image
- Other techniques including, learning about when or when not to use strong tonalities, negative space, balance, framing, bringing out your personal vision and eliminating any flaws that negatively affect your images
- Choosing the right focal length (lens) to convey your story
- Learning to think about how you want your image to look while in the field, not after the fact
- We will discuss how to make panoramas and long exposures, and how to use focus stacking and HDR effectively
- Basic processing, workflow, how to use available programs (Adobe) as well as other software (NIK, Topaz etc. software), together

Most of the instruction, nature photography techniques and tips take place right there in the field. We take time in the evenings and periodically during the day to review our images in informal critique sessions. We also make special presentations concerning nature photography from time to time. There’s no need to take notes; after the workshop you’ll receive a complete 80+ page syllabus containing everything we discussed and more.

Gear and Packing



Make sure your laptop is in good operating order. A laptop and a thumb drive will be necessary in preparing images for review as well as backing up your work.

> If possible, we highly recommend using Adobe Lightroom Classic and or Adobe Photoshop as we do. Other software such as On One, etc. is fine if it works for you. If you are using other plug-ins (Nik Software, Topaz,) make sure they

are functioning as well. It is always a good idea to log in and out of before leaving home, (**NOTE:** if you are using the Adobe subscription Adobe wants to see you log in online at least once every 30 days. Please make sure you are using the current versions.

> Pack your cameras and lenses so they are easily accessible, and you know where everything is in your bag.

> Clean your camera(s), lenses, and sensors. Make sure your date, time and meta data information is current.

> Remember your memory cards and it is always a good idea to set your camera so it will only operate with a memory card in the slot. If not, you may find that you forgot to put the card in the camera.

> Read the recommended gear list in our GENERAL INFORMATION/ workshop specific) Handout. Try not to over pack.

> Ensure that you bring all your cables, adapters, and other accessories. We suggest you bring a small travel power strip if possible. Jack uses [THIS](#) one.

> If you are flying, remember to **pack all your lithium batteries in your carry-on bag**, (you need to comply with FAA flight regulations.

TIP: Set your camera so it will only fire with a memory card in the slot. You never know when you might forget to put the card back in the camera, and the last thing you want is to find out later that all those “shots” you took were not saved.



Clothing and gear to be prepared.

While you do not want to overpack, having the proper clothing along will make your workshop be much more enjoyable. We'll inform you upon registration about the weather and be very specific about our recommendations as far as dress preparedness goes. For example, many times we recommend bringing rain pants as well as an extra pair of gloves & socks in case the first gets wet. We recommended that you prepare for the unexpected.

Make sure your boots are properly fitted and broken in. New boots are often uncomfortable. Waterproof boots / Gore-Tex boots are best. Sometimes just a comfortable pair of shoes or sandals will be fine, and we will let you know that as well. Do not be hesitant to [ASK US](#) if you have any questions about your footwear.



Be sure to check the specific Workshop Information what we send out after registration. These are workshop specific and will help you to be prepared.

A MUST for EVERY WORKSHOP



1) STURDY TRIPOD

Also, be sure you also have the tools needed to adjust. A great quote from Bill Fortney....” there are two kinds of tripods, those that are easy to carry and good ones”

2) BALLHEAD (highly recommended) AND CAMERA / LENS PLATES

There are a lot of good ball heads available. A ball head makes the kind of photography we do here easy and will help you get the images you are looking for. If we are conducting a photography wildlife (such as our Alaska Bear Workshop) and gimble head may be a consideration but not a necessity. Please invest in a quality product. There are many cheap products around. Please do not buy these items the day before you leave. Buy them and get used to them before our workshop.

For ball heads, we recommend Really Right Stuff [BH-40](#) or [BH 55](#), as well as the [KIRK](#)



[BH-3](#) and [ACRATECH Ultimate Ballhead](#) You will need ball head plates for all your various cameras and telephoto lenses (with collars),. These plates are camera and lens specific! Cheap plates are usually just that, cheap. BUY GOOD PLATES like the ones from the [Really Right Stuff](#) or similar quality.



A tool, usually an allen wrench and screwdriver is handy to install, adjust and remove them as well as adjusting your tripods. Jack carries [this tool](#) from SMALLRIG that pretty much covers everything.

TWO CAMERA BODIES

In the event of failure, you will have a backup. In many locations we travel to a camera store is far, far away. Even AMAZON Prime does not deliver to these locations in a day or two. Be prepared. Have a backup in case of accidental damage or electronic failure. AS previously stated, bring your manual for your camera! This can be immensely helpful. **Download the PDF and store it on your smartphone or tablet if possible.**

BATTERIES

Bring plenty of batteries for your cameras, and chargers as well.



Having a [power bank](#) to recharge your batteries can come in handy at times when you don't have access to a wall outlet.

LENSES

Please refer to the **WORKSHOP INFORMATION** (workshop specific) for the lenses we



recommend for the workshop you are joining us on.

(MM are in full frame) For most workshops, a wide-angle zoom (16mm-35mm, 17mm-35mm), a general-purpose zoom (like 24mm-70mm or 24mm-105mm), and a medium telephoto zoom (like 70mm-200mm) are perfect. For a wildlife workshops, 300mm lenses with teleconverters are valuable. Longer glass is often helpful. It's up to you how much you want to carry.

On certain workshops (Such as our Alaska Bear Workshop) there are weight restriction on the flights we take. We'll inform you on this as well. If you do not own these lenses, you can rent them ... remember some LENS CLEANING CLOTHS.

FILTERS

We believe filters are still essential to photographers in the field for getting the image “right” in camera. Plus, there are some things you cannot “fix” in post processing.

We carry a Circular Polarizing filter (CPL), Graduated Neutral Density Filters (GND) as well as some specialty filters such as a six stop and 10-stop Neutral Density filter for cutting down the light for long exposures.

We have tried most the major brands of filters and am currently working with [Breakthrough Photography](#) and [H&Y filters](#). Both provide amazing optical clarity with minimal color cast. H&Y has an amazing magnetic system that I have used extensively with remarkable results. You can receive a **10% discount** on H&Y Products by using code **JPED10** at checkout.

WIRED REMOTE TRIGGER

This is typically needed when using Bulb mode. We usually carry an intervalometer that does the remote trigger job and is great for time-lapse and nighttime photography.

LENS CLEANING CLOTH The best cloths I’ve found to wipe down and clean just about anything are the [Amazon Basics Microfiber Towels](#) pack of 24 for \$14.95. I always have 2-3 in my bag.

MEMORY CARDS

You will want to have plenty of these—ideally enough that you will not have to format any while on the workshop. A good rule of thumb is to have enough memory cards for a trip that you do not have to delete any images while travelling. We **strongly advise** against deleting anything while on the road. **WAIT** until you get home and review on a bigger screen (not LCD) to remove unwanted images. Once deleted, you cannot get them back. By all means copy your files to a portable hard drive every day, but try and keep your files on your cards, just in case!

Not all memory cards are created equal so do not trust your images to cheap or poor-quality cards. Some are faster than others. Does your card take a long time to buffer (even after turning off your long exposure noise cancelling in your menu)? If you are shooting video, you need large and fast memory cards.

Never heard of ProGrade Digital? This company was founded by the management and engineers from Sandisk and Lexar with the goal to create the finest cards available. They pay meticulous attention to detail and test their cards for speed and accuracy better than anyone. Simply put, [ProGrade Digital](#) produces what we think are the best and fastest card readers available. THIS CODE=[jackgraham10](#) will get you a **10% discount**.

Check out our podcast with Mark Lewis, the CP of Marketing at ProGrade. You will hear some interesting info about the world of memory cards. www.wetalkphoto.com **Remember---do not forget your card reader!**

LAPTOP

Bring a device to review and do minimal processing on your images for the image review sessions. Do not forget charging cord! Make sure all software is up to date and functional. We use Lightroom Classic and Adobe Photoshop (along with some plug-ins) for post-processing. You may also use other software programs.

PORTABLE HARD DRIVE

We back up our images each night to a portable hard drive (and DON'T DELETE from memory cards). Having two copies of your images is a good safety measure. We have found that the [Samsung T7](#) or [Sandisk Extreme Pro](#) are both fantastic lightweight SSD drives.

A GOOD USB HUB

These are very handy. Some are better than others! Jack uses [this one from ANKER](#). It is fast having plenty of options and is reasonable priced. (It is USB-C into your computer. If you don't have an USB-C input, get a [USB-C to USB adaptor](#).)

PLUG ADAPTERS

If you are traveling internationally, you will need [adapters](#) for your electric plugs.

DUST and RAIN PROTECTION

If it rains, we will be out in it (unless it is bad). Protecting your camera and lenses is essential and a good rain cover should be easy to put on and off and be easy to use in the field.

I use the [MOVO STORM RAINCOVER](#). It is simple to use and covers most of my lenses. There are others that work well. I will also grab the shower cap from hotel room to slip over my camera to protect it when I am not shooting.

Not all lenses are sealed lenses and dust can get into them even when you think it cannot
There are many ways you can protect your gear from rain.



THIS blower (Left) is great for blowing off dust from your sensor and lenses.

Order it [HERE](#) from AMAZON.

BACKPACK

We have and use many different packs for different purposes. My go to backpack these days is the [MINDSHIFT FIRST LIGHT 20](#) You'll want a comfortable camera backpack. The [MINDSHIFT FIRST LIGHT 30](#) is a bit larger and is great as well.

Headlamp/Flashlight – Pre-dawn and post-sunset it is extremely helpful to have a light. **Here is my new favorite!**



[Black Diamond ReVolt Headlamps](#) ☑ One Triple Power LED, two Single Power white LEDs and two Single Power red LEDs emit up to 130 lumens (max setting with alkaline batteries) (also available at REI and other outdoor retailers, in green I believe as well)

WATERPROOF BOOTS OR OVERSHOES

Sometimes you want to stand in a stream or ocean. We often use the overshoes from NEO that fit over your existing footwear. They are terrific. Check them out [HERE](#)

CLOTHING

Weather anywhere we travel to is usually unpredictable and so is the recommended clothing. As a rule of thumb these are our recommendations. We will inform you well before the workshop as to the weather, however weather is unpredictable, so we need to be prepared. We know some of this is repeated, but it is important.

- **Waterproof/Windproof Jacket** – A good Gore-Tex jacket for rain and wind protection.
- **Insulation Layers** – Remember, we will let you know about weather and how cold or warm it will be. Be prepared that the mornings and evenings, depending on the location and time of year, can be cool to cold, however by noon or so it can be very warm. It is always a good idea to be prepared. We will let you know the projected weather and temperatures etc. well before our workshop.
- **Head Protection** – A warm hat for cool mornings and evenings will help you stay warm
- **Hiking Boots/Shoes** – We may be walking over uneven terrain in search of Fall color, along with wet/muddy conditions if it rains. Good waterproof footwear is important!
- **Hiking Socks** – Warm socks that will keep your feet warm even if wet. Wool or wool-blend socks work best
- **Gloves** – for the cool mornings

Recommended: Good things to have along!

- [Lens wipes, from ZEISS](#)
- **Water Bottle**
- [SUNSCREEN, BUG REPELLENT, MOSQUITO HEAD NET](#)
- **BACKUP ID**

For international trips, in case you lose your passport or driver's license. A photo of your passport is necessary, plus another form of ID like a birth certificate or driver's license. You may also want to bring some printed passport photos.

INSURANCE

Trip Insurance typically covers you when you must cancel a trip due to an illness, injury, work-related reasons, or family medical reasons. Coverages can include reimbursement for money paid to airlines, our workshop, and other travel providers. It is your choice to purchase this insurance, or not.

**See NEXT PAGE for information on
MAKING THE PROPER EXPOSURE**



EXPOSURE EXPLAINED

USING *APERTURE*, *SHUTTER SPEED* AND *ISO*
TO ATTAIN THE PERFECT EXPOSURE.

© JACK GRAHAM

Proper exposure is made up of three different settings in your camera. Digital cameras make it easier than the cameras back in the film days because you can now preview the image before you take it. However, often there's not enough time to preview the image, and spend time thinking about exposure so you really need to master this aspect of photography and adjust your setting as desired. For new photographers this looks complicated, but it is not once you learn the concepts.

Aperture, shutter speed and ISO combine to control how bright or dark the image is (the exposure). Using different combinations of aperture, shutter speed and ISO can achieve the same exposure. A larger aperture allows lighter to hit the sensor and therefore the shutter speed can be made faster to compensate.



The exposure triangle: when you increase the exposure for one element (a yellow arrow), you need to reduce it for one or both other elements (the grey arrows) to maintain the same exposure. When your camera is set to Aperture Priority or Shutter Priority the camera will adjust automatically. In Manual, you will have to self-adjust these settings.

The three fundamental elements of exposure: aperture, shutter speed and ISO.

The three camera settings that give you control over the exposure are aperture, shutter speed and ISO – each is measured in stops. For example, a shutter speed of 1/125 sec is one stop slower than 1/250 sec, which means the sensor is exposed for twice as long. However, the same 1/125 sec shutter speed exposes the sensor for half the time of a shutter speed of 1/60th

Aperture

Aperture affects the depth of field, or how much of an image appears sharp. The size of the aperture can be set by you. By picking the aperture you want, you control how much or how little light passes through the opening, affecting the exposure and depth of field.

Adjust the aperture or F-Stop, you now can select which areas of an image you want to be sharp. For most landscape images, you most like will choose to have the zone of sharpness right from front to back. Many portrait photographers choose a reduced depth of field, this isolating the subject from the background and blur out distracting elements is necessary.

The aperture setting is measured in f-stops, with apertures such as f/2.0 and f/2.8 often referred to as 'wide' apertures, as they have the widest opening and let in more light.

Apertures with higher f-stop numbers (f/11, f/16, f/22 are commonly referred as small, (narrow) apertures with the smallest openings. And let in less light.

Lens apertures operate just as the pupil in your eye does.



F 16



DOF-Blurred Background

F 5.6

Shutter Speed

Shutter Speed affects image sharpness, with slower shutter speeds leading to blurred images, caused by the subject moving or the camera not being held still. The shutter speed is how long the camera sensor is exposed to the light passing through the aperture. This can be as fast as 1/10,000 sec to over 60 seconds plus. Shutter speed determines how movement is captured.

If you choose to extend the shutter speed – for example to blur your subject, you must limit the amount of light reaching to the sensor, to avoid overexposure. To accomplish this, make the aperture smaller. Shutter speeds are calculated so that each step-in shutter speed doubles (or halves) the exposure. For example, changing your shutter speed from 1/60 sec to 1/125 sec will half the exposure.



ISO 160 **40**Sec F22



ISO 160 **80**Sec F 22

ISO choices enable you to use the optimum combination of aperture and shutter speed when the amount of light would normally prevent you from doing so. Most photographers simply adjust the shutter speed and aperture to control exposure, but in low lighting conditions increasing the ISO is necessary to attain higher shutter speeds to avoid shake when hand holding or in windy conditions. ISO settings follow the same two times exposure steps as aperture and shutter speed adjustments. You can adjust and match settings to achieve the same exposure.



ISO 1600 F16 1/5sec



ISO 800 F 16 1/3 se



ISO 400 F16 0.6 sec

For example, increasing the ISO from 200 to 400 will double the exposure time from 1/125 sec to 1/60 sec Just like opening the aperture from f/11 to f/8 will double the exposure.

ISO settings follow a fixed set of values, each one offering twice the sensitivity of the one before. However, increasing the ISO also reduces the quality of your images. Some camera models are grainier than others at higher ISO's.

ATTAINING CORRECT EXPOSURE:



By activating the camera's meter by half-pressing the shutter release, the camera will suggest an exposure based on the brightness of the metered area and the brightness of the scene being metered.

Aperture Priority or Shutter Priority give you more control over your exposure, each in a separate way. The Manual Mode gives you full responsibility over aperture, shutter speed and ISO.

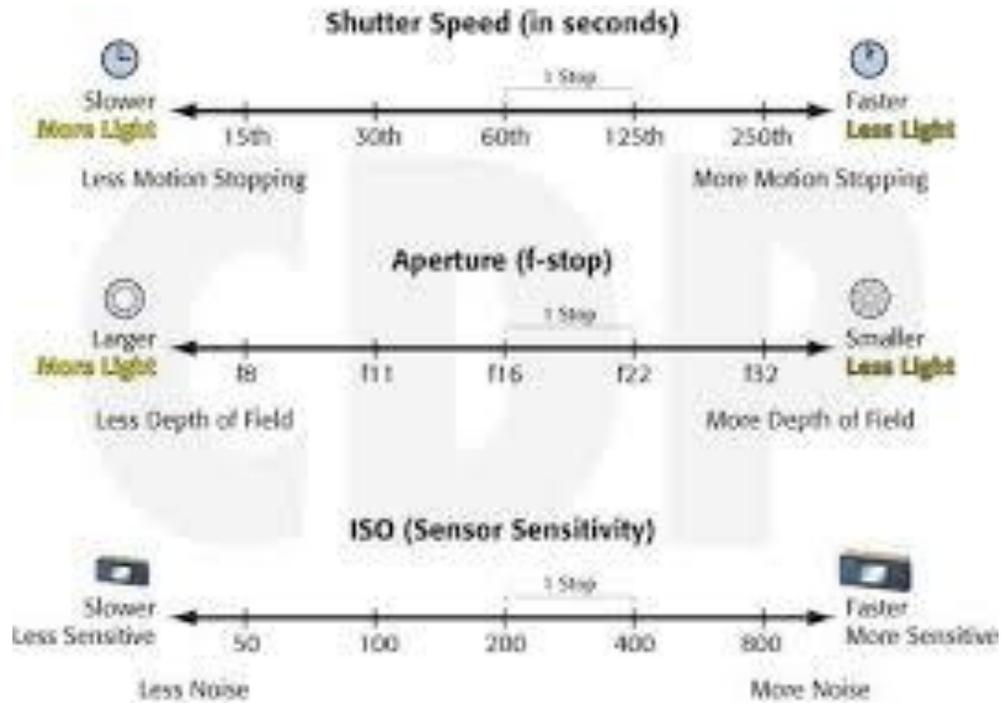
Program (rarely use the Program Mode—the camera is making ALL the decisions. not you. they will not be what you need to choose or what you want!)

If you increase the settings that control the exposure (**aperture, shutter speed or ISO**) then one or both other settings must decrease by an equivalent total to maintain the same overall level of exposure.

For example, an exposure of 1/25 sec at f/16, ISO 100 is equivalent to an exposure of 1/400 sec at f/2.8, ISO 100. Because the shutter speed has been reduced by four stops (1/25 - 1/50 - 1/100 - 1/200 - 1/400), which means less light is being captured, the aperture must increase in size by four stops (f/16 - f/11 - f/8 - f/5.6 - f/2.8) to allow more light in - otherwise the picture would be four stops darker.

Do you need to determine if you want a large depth of field or a shallow one? Do you want moving objects to be razor-sharp or have motion blur?

BALANCE YOUR EXPOSURE



However, by choosing APERTURE PRIORITY or SHUTTER PRIORITY, the camera does this work for you. For example, in Aperture Priority the shutter speed will be set automatically and if you change the aperture, the shutter speed will adjust accordingly. The same goes for Shutter Priority.

By adding some compensation (set using the camera's compensation dial) you can adjust the scene, darker or brighter as you prefer.

BEST PRACTICES:

- USE the LOWEST ISO possible for less grainy images.
- Higher Aperture for increased Depth of Field, Lower Aperture for blurred backgrounds
- The faster the shutter speed, the more “frozen” a subject is. Slow shutter speeds for intentional blurred objects.

To become proficient with exposure settings, practice and note the differences between different settings. You do not have to be in a National Park to do this. You can do it in your living room or backyard. Set up several images with different settings. This way you will be able to see exactly what your camera can or cannot do and be ready when you are in the field.



ISO 160 F16 1 Second -1/3 compensation