



Magic of Hummingbirds Pre-Workshop Worksheet

Rationale:

As you build excitement for your upcoming Hummingbird Photography workshop with Lisa Langell and Kim Gray, there are things you can do today, in preparation for your workshop, that will help you better learn your camera and be more efficient for photographing hummingbirds when you arrive.

One of the single biggest challenges many participants have when starting out with hummingbird photography is not knowing how to locate or adjust certain functions within their cameras menus that are required for hummingbird photography with off-camera flashes.

Why the pre-workshop worksheet? In our experience, most participants of any photo workshop usually dislike when a leader takes your camera, makes menu adjustments to it, and hands it back to you. You wind up not knowing what was adjusted or how to change it back to the original way it was set up. Our worksheet helps empower you to know what to do with your camera, determine how these adjustments are made--*and* how to change them back when you are finished with the workshop!

We recommend looking YouTube (or similar) videos and/or using your manual to ensure you can locate and adjust the following functions properly. You can then arrive at the workshop ready to begin without unnecessary delays.

Let's begin...

HUMMINGBIRD PRE-WORKSHOP ESSENTIAL SETTINGS WORKSHEET:

The following camera settings need to be set before you arrive at the workshop. This worksheet is set up so that you can not only set the correct settings, but remember how you did so. That way you will have your camera ready for our workshop and can also change the settings back to your original settings, as-needed, painlessly. We recommend writing the steps down for how you access each setting in the menu (or on the dials). That way you can easily refer back to them as needed.

When you are finished, we recommend bringing your completed copy of the worksheet to our eventd.

SETTINGS TO TURN OFF:

1. **Turn OFF Live Exposure View / Exposure Preview / Exposure Simulation** (Mirrorless cameras only)

Rationale: When using off-camera flashes with mirrorless cameras for hummingbird photography, we will use extremely unusual Shutter Speed, Aperture and ISO combinations that will render any naturally lit scene virtually black when viewing it using Live Preview in your viewfinder. This is because the camera does not “know” you have off-camera flashes to help expose the scene. These settings also make focusing impossible because you will not be able to see your subject through the viewfinder to do so. Turning off Live View will allow you to easily focus without problems.

- **Rationale:What is it?** Live exposure preview is the preview of the exposure you would get when looking at a scene through the viewfinder of most any mirrorless camera, while applying your current exposure settings [e.g., Manual (shutter speed, aperture, and ISO), or Shutter Priority, Aperture priority, Auto, “P,” etc.]. Live Exposure Preview may be called by different names depending on your camera’s brand and model.

Homework: **Turn OFF** “live exposure view” (different brands may call it by different names). Write down the steps to access this feature in your menu and disable this feature in each camera body you are bringing to the workshop:

2. Turn OFF Image Stabilization / Vibration reduction on your lens (and/or in-camera)

Rationale: When using a tripod with longer shutter speeds, such as for Bat Photography or Night Photography, the camera seeks to stabilize itself. This can create subtle motion within the camera and result in blurry images. When conducting bat or night photography, where you will use shutter speeds of 1/8 to 1/25 of a second, image stabilization becomes confused when a tripod is used and may create blur in your images unless you turn it **OFF**.

Homework: Turn OFF “Image Stabilization (IS)/Vibration Reduction (VR)/Vibration Compensation (VC) / Sport Mode” (different brands may call it by different names). Write down the steps to access this feature in your menu or on your lens and memorize how to enable/disable this feature in each camera body or lens you are bringing to the workshop:

3. Turn OFF: Electronic shutter (Mirrorless only)

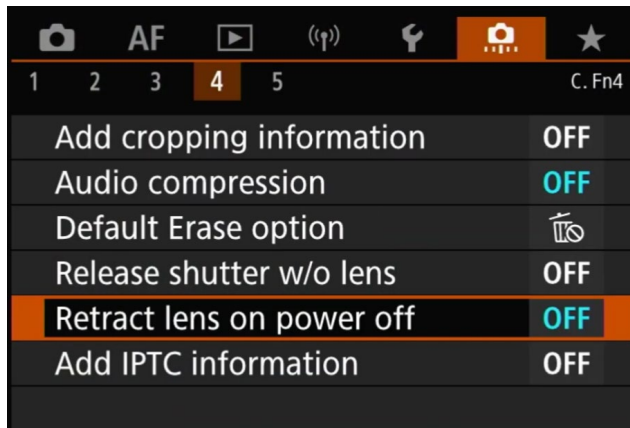
NOTE: if you have both Electronic Shutter and Mechanical Shutter options on your camera body, enable *Mechanical Shutter* only. (NOTE: Nikon Z9 does not offer this option, so ignore this item if this is your camera).

Rationale: When using flash photography, the flashes do not have the ability to recharge quickly enough between shots to accommodate high-speed shooting (e.g., 5-6 frames per second). Similarly, with long-exposures used during bat photography (late summer sessions only), electronic shutter does not work at shutter speeds of 1/5th second or longer. There are also other image artifacts that can be avoided by turning electronic shutter OFF. Lastly, the Pocket Wizards (radio transmitters) we use to communicate with the flashes do not typically work with Electronic Shutter. Thus, we will be using only *mechanical shutter for hummingbird and/or bat photography*.

Homework: Turn OFF/Disable Electronic Shutter and enable Mechanical Shutter for each body you will be using to photograph hummingbirds and/or bats. Write down the steps for how to do so in your camera(s) menu.

4. **Turn OFF:** (Canon mirrorless only) “Retract Lens on Power Off” mode.

It is *imperative* for both hummingbird and bat photography to turn this mode OFF. Most Canon mirrorless camera menus will have it here:



Here is a short video on the topic if extra explanation is needed:

<https://youtu.be/OQKYrJbfmrU>

Homework: **Turn OFF/Disable** “Retract Lens on Power Off” for Canon Mirrorless. Write down the steps on your menu for how to enable/disable this feature.

SETTINGS TO TURN ON:

5. **TURN ON** “Blinkies,” “Highlight Alert,” “Zebras,” etc. in Image Review / Playback mode:

Rationale: These tools are offered by various names in your camera, depending on your brand/model(s) of cameras. They allow you to tell if your image has blown/clipped the highlights or shadows in an image after it has been captured.

It is critical that you learn how to do this in **IMAGE PLAYBACK MODE (DSLR & Mirrorless)**, not just live-view mode via your LCD screen or viewfinder as live-view mode is never used at this workshop. We use the “Highlight alerts, Zebras, Blinkies, etc. constantly for ALL styles of hummingbird photography (traditional, high key and low key).

Most cameras have the ability to turn this functionality on/off in playback mode. Occasionally your camera will not, but do your research first to ensure you are not missing this important functionality in your camera.

Homework: **Enable** “Blinkies, Highlight Alerts, Zebras, etc.” (name varies by camera brand and model).
Write down the steps for how to enable / disable this feature:

6. **TURN ON** your histogram in image playback mode (not live-view mode) in DSLR and Mirrorless cameras:

Rationale: We will use your histogram regularly. It is important in order for you to obtain the correct exposures for your images and using the histogram to help give you a read of the overall exposure is tremendously helpful.

Many mirrorless cameras will display a histogram in live-view, but we actually will require you to review your histogram from your images, in-camera, *after* they are captured. This, again, is because

we are using flash and your camera's viewfinder in live-view mode does not respond properly (mirrorless cameras). It is critical that you know where to find and display your histogram in image playback mode.

Homework: Enable your histogram in image playback mode (not live-view mode) in DSLR and Mirrorless cameras. Write down the steps in your menu or outer buttons to do so:

ADDITIONAL SETTINGS AND TESTS:

7. Test your remote trigger:

It is essential that you learn how to operate your remote shutter trigger with your camera before you arrive. We find some participants bring new triggers without testing or learning how to use them in advance only to realize they don't know how to operate them, or they do not work properly, or are missing batteries, etc. Ensure you can sit next to or behind your camera, use it to make images, and that the trigger works properly.

NOTE: Apps for your phone may/may not work at the speeds you would like them to. We truly suggest a simple wired trigger as at least a back-up option to any advanced or app-based gear you bring. Even the \$10-30 ones on Amazon or your camera store of choice are great—just make sure it works for your camera(s). Your instructors are not responsible for helping you make your triggers work properly.

Homework: TEST YOUR REMOTE TRIGGER.

- Ensure it clicks every time you press the button.
- Ensure you can set it into the "lock" position.
- Ensure there is not a short or other problem.
- Check to make sure it works with both camera bodies (if you are bringing two)

8. **Test your Intervalometer (in-camera version) or wired/wireless intervalometer built into your remote trigger (if your model offers it):** Intervalometer needed for bat photography only (late summer workshop).

Bat photography requires the use of either an in-camera intervalometer or a remote (typically wired) intervalometer. Check your manual to see if your camera offers an in-camera intervalometer feature. You must be able to set your intervalometer as follows:

- 1 second (or faster) interval between images
- Infinite number of images

If you are using a wired intervalometer, ensure it has fresh batteries (if required) and that it does not have any shorts. Test it out thoroughly with your camera so you feel comfortable using it.

Homework: TEST YOUR INTERVALOMETER (BAT PHOTOGRAPHY ONLY – LATE SUMMER WORKSHOPS)

If using wired (corded) or remote intervalometer:

- Ensure it has fresh batteries before your workshop begins (if batteries are required)
- Ensure you can set it into the “lock” position (wired/wireless versions only, not in-camera version).
- Ensure there is not a short or other problem (if using a wired intervalometer).
- Check to make sure it works with both camera bodies (if you are bringing two)
- Set intervalometer to 1-second or faster intervals between shots
- Set to infinite number of images
- Ensure it fits into your camera(s) port or that you can connect it to work with your camera
- Know how to stop the intervalometer when you need to pause it from taking photos
- Know how to restart it again

If using in-camera intervalometer:

- Write down the steps to find your intervalometer in the menu
- Know how to set the intervalometer to 1-second intervals between shots, especially when you are working in the dark
- Set to infinite number of images
- Know how to stop the intervalometer when you need to pause it from taking photos
- Know how to restart it again

NOTES:

9. Ensure you know how to enable the following settings on your camera(s):

Homework: **Ensure you can do the following:**

- Drive Mode:** Adjust settings to One-shot shooting (a.k.a.: single shot mode)
- Know what dials/buttons/menu options** adjust your aperture, shutter speed and ISO settings in Manual Mode
- Operate your tripod fluently**
- (OPTIONAL, but recommended): Shoot using RAW mode and/or RAW + JPEG, as RAW will give you the best file for post-processing.**

Write notes for reminders on how to do the above if you are not fluent in these skills:

Thank you for taking the time and making the effort to do the homework! It will greatly enhance your photography, efficiency, and experience at Magic of Hummingbirds! -- Lisa Langell & Kim Gray