
A QUICK GUIDE TO INSECT PHOTOGRAPHY (SPIDERS NOT INCLUDED)

Quick Guide
Written by Lisa Cannon



Before you dive into this guide, here's a few other free resources to help you learn photography:



What is Your #1 Photography Killer?

Take this 30 second quiz to find out the #1 thing holding your photography back.

[Take Quiz →](#)



3 Free Photography Cheat Sheets

Grab 3 free photography cheat sheets that will help you understand the basics.

[Download Cheat Sheets →](#)



Free Photography eBooks

Free access to our library of 250+ downloadable (pdf) tutorials on everything you can imagine.

[Download eBooks →](#)



Want quick photography tips?

Check out our friends at DailyPhotoTips.com they'll send you 1 solid photography tip to your inbox, 5 days a week. So you can start your day right, with actionable tips to help you on your creative journey. [Subscribe now →](#) (free for a limited time)



Photograph by Lisa Cannon

Golden-winged Skimmer dragonfly

Every time we step outside, we enter the home of our insect neighbors, and depending on our perspective, we either consider them friends or foes. When they seem intent on making my garden crops into their lunch, I admit I am not so fond of them. But when my camera is in my hand, my opinion can change dramatically. Suddenly I find I'm much happier to see them.

Insects can be excellent photography subjects. They can be interesting to watch, are generally busy, and often have beautiful bright colors and unusual patterns on their bodies, wings, or shells. Often tiny and quick, they can be challenging to capture, but if you enjoy the chase like I do, that can be highly entertaining. They are also all around us, so they are a great choice of subject any time you feel like shooting.




Photograph by Lisa Cannon

Male Emerald Spreadwing Damselfly

Are you interested in getting started with insect photography? Or maybe you're looking for ideas to help you improve? Follow along as I share some basic information and a few of my favorite tips for creating great new insect images for your portfolio.

Here's what I'll cover:

- Patience, Grasshopper
- Macro Basics
- Best Gear Choices
- Settings
- Location and Compositions
- Focus Stacking
- Using Flash
- Image Quality

 **Recommended Reading:** If you'd like to improve your composition skills for better images, grab a copy of Photzy's best-selling premium guide: [Understanding Composition](#).




Photograph by Lisa Cannon

Honeybees

PATIENCE, GRASSHOPPER

The first thing I want to mention is that when setting out to create insect images that we can be proud of, it is important to remember that it can require a fair amount of patience. Since bugs have little minds and lives of their own, we can't always line up the perfect shot with the perfect pose. It is important to remember that we may need to wait for an insect to show up and for it to move into a position that we want to capture. It may also take several tries to capture a sharp image because your insect subject just may not be still. Keeping this in mind may help to keep frustration from setting in.

 **Key Lesson:** Remember that your patience will be rewarded when you come home with images you love.

MACRO BASICS


My preferred way to capture insect images is by using macro photography techniques. It is not the only way, but the fact that I am a macro shooter means it is natural for me to apply that skill set to these types of images. The fact that the subjects are very small means macro lends itself to the genre very well.

For those unfamiliar with macro photography, it is defined as capturing images of small objects at life-size or at the ratio of 1:1 of the subject to the size of the camera's sensor. Close-up images are also often included in the genre regardless of the ratio. The images are created by shooting with your camera lens close to the subject—macro lenses are designed to provide shorter focal distances to allow you to get in tight.

An important thing to know about shooting macro images is that you will be working with a much

shallower depth of field. Choosing the best aperture to shoot at will take a little practice. You may find yourself choosing higher apertures to keep more of your subject sharp. And it also means that even slight movements while shooting will impact the sharpness of the images. Shooting on a tripod can help in some instances, and higher shutter speeds can help reduce camera shake when the lighting allows. Using manual focus can also help.

This is just a very basic run-down of macro photography. For a deeper dive, I suggest finding online resources. There are many great articles, lessons, videos, and social media groups that can help you get started or improve your macro images.

 **Key Lesson:** Macro photography can provide some unique challenges for beginners. Make use of online resources to learn and grow your skills.

BEST GEAR CHOICES

The most logical place to start when discussing gear is with the camera. You will need a camera body that allows you to change lenses, but that is the only “must-have” in my opinion. Knowing how to properly use your gear is more important than using high-end gear. Macro photos are best achieved using a macro lens, but they’re not cheap to purchase. You can look at purchasing a used lens, or you can try one of these other budget-friendly options.

The first option is a close-up filter. These are screwed onto the front of your lens and act like a magnifying glass. The filters can vary in price; it is important to remember that you will be shooting through the filter, meaning the quality matters. Low-quality filters can negatively impact the clarity and sharpness of your images.

Extension tubes are another lower-cost option. They can be added between your camera and any lens to allow it to work like a macro lens. They generally come in a set of three and can be used individually or combined to give you greater magnification. Because they don’t have electronic or glass elements to increase the price, extension tubes are a great, affordable option.



Photograph by Lisa Cannon

My macro photography kit



Photograph by Lisa Cannon

Bees, taken with my Samsung S20 FE

Having said all that, you may find yourself in a situation that allows you to shoot with the macro setting on your cell phone camera. If your subject is relatively still, and you move slowly and carefully, you may be able to get your phone close enough to get a great shot. I was able to capture the photos on this page and the next using my phone camera.



Photograph by Lisa Cannon

Grasshopper, taken with my Samsung S20 FE

Because lighting is always important in photography and can be a challenge in macro, you can add some tools to your kit to help. If your budget is tight, one option is to add something as basic as a small reflector or simple fabric diffuser. Or you can get technical and use a flash and dedicated diffuser combination. Remember that there are no right or wrong choices for lighting your images – it's a personal preference.

◆ **Key Lesson:** Building the best macro kit that you are able to will help in your quest for successful insect images. Budget, skill level, and photographic tastes can help guide you toward the gear best suited for you. The internet is always a great place for information; your local camera store can be the ultimate resource to help make your final choices.

CHOOSING THE BEST SETTINGS

What are the best settings for insect photography? Well, that depends. Are your insect subjects relatively still, or are they busy and active? Do you want to keep as much of the insect as you can sharp, or to be more creative and capture only the face in detail? Are you working with ideal lighting conditions? These are the main questions to ask yourself to help you choose the best settings for the situation.

Shutter speed is a great place to start when choosing your settings. If you are trying to shoot a slow-moving or stationary insect, then your shutter speed does not need to be very high. When shooting hand-held, you want it to be high enough to help eliminate camera shake because macro images are more sensitive to it. Image stabilization in your lens and/or camera body can help as well. I find that as long as I keep my shutter speed above the focal length of my lens, I don't have issues with camera shake. If you are shooting an active insect or want to capture one in flight, then you should keep your shutter speed high. This will eliminate motion blur in the insect bodies while also slowing the movement of the wings to make them more visible. In my opinion, insects in flight look a little strange when you can't see their wings.

The next choice to make will be your aperture setting. Keeping in mind that the depth of field in macro photography is much shallower, choosing how much of

the insect you want to keep sharp affects your aperture choice. Don't forget that choosing a higher aperture and increasing the depth of field means that the insects' surroundings and the background will also be affected. It can be a tricky balance between a sharp insect and a soft, less distracting background. I like to start at around f/5.6 and work from there. Check your images to see if you are getting the look you want, and make adjustments if you need. A low aperture can be great if you can shoot an insect from directly in front—it will help to keep its face sharp while softening everything else and help your little subject stand out in the final image.

The last setting to talk about is the ISO setting. I always have my camera set to manual mode, meaning I can choose my shutter speed, aperture, and my ISO. However, through trial and error, I have learned that when I shoot bugs, I get the best results when I set my ISO to Auto and let the camera do the work. Because I shoot hand-held and follow my subjects, the lighting conditions can change quite a bit. And given that I want to be able to react quickly, it makes sense to me to remove the one adjustment that I would have to be constantly making. My camera can produce great quality images even if it chooses a high ISO setting. If that's not the case for you, remember that post-processing software does a great job of noise reduction these days. A noisy image is not necessarily a failed image.



Photograph by Lisa Cannon
Shot at 1/1250, f/8, ISO 4000

💎 **Key Lesson:** Thoughtful settings choices will make all the difference when creating insect images. Letting your camera choose your ISO can help you react to your subjects quickly.

Now that our gear is ready and our camera settings are in place, it's time to go out and shoot!

📖 **Recommended Reading:** If you'd like to improve your composition skills for better images, grab a copy of Photzy's best-selling premium guide: [Understanding Composition](#).



Photograph by Lisa Cannon

Tiger Swallowtail butterfly, Victoria Butterfly Gardens

LOCATION AND COMPOSITIONS

One of my favorite things about creating insect images is that I can just step out my door to do it. I don't have to go anywhere to find subjects – they're everywhere! That doesn't mean I don't go to other locations to shoot. Different locations have different insect life. Recently I found different varieties of bees in a friend's yard, dragonflies and butterflies in a wetlands area in my city, and grasshoppers and long-horned beetles while on vacation at a campground in northeastern Saskatchewan. I have also visited three different butterfly conservatories over the years, where I've created some of my favorite images.

Composition can be trickier than finding a subject to shoot. Chances are you will be shooting in areas with other foliage and vegetation that will need to be taken into account or worked around. And since we can't "direct" our insect models, we may need to get the best composition we can at the moment and then work with the cropping tool in our post-processing software to refine it.



Photograph by Lisa Cannon

Ladybug

This doesn't mean you can ignore composition completely. You still want to watch your aperture, as that will affect how busy the other elements in your image can appear. Try changing your position in relation to the insect to see if you can improve how the elements interact within your frame. Look for bright spots in the foliage in the background, as these can distract attention away from your insect subject, or you can use them to highlight it, depending on how you align it in the frame. Don't be afraid to get down on the ground and take a more "bug's-eye" view of the scene, as this may even help to clean things up a little, as it did in this example.

I created the image on the left by lying on my stomach in the grass. This helped to remove the busyness of the rest of the lawn around the ladybug that would be seen if I was to shoot from a higher vantage point. It also allowed me to catch the unique view of a ladybug getting ready to take flight that I would not have gotten if I had shot down on the scene from above.



Photograph by Lisa Cannon
Great Spangled Fritillary

One more thing to consider is the angle you may want to capture your subject. While insects may present with interesting body features or unique patterns and colors, remember that these little guys can have interesting faces too. With some creatures like moths and butterflies, you may be able to capture both, but in other cases, you may need to choose. I also like to look for opportunities to imply the personality of the little creatures if I can.



Photograph by Lisa Cannon
Common Blue Damselfly



Photograph by Lisa Cannon
Grasshopper

◆ **Key Lesson:** You may not be able to get a perfect composition in the field, but work to get it as close as you can to allow you the option to fine-tune it in post-processing. Consider all aspects of the creature in front of your lens when you choose the angle to shoot from.



Photograph by Lisa Cannon

Images used in the bee stack

FOCUS STACKING

I talked earlier about how your aperture choice will affect how much of your subject is sharp. One of the more advanced techniques you can also use to do this is to focus-stack your images. Simply put, this means you take a series of frames, changing only the focus point on your subject, and then use the software in post-processing to stack them and create one image with a deeper depth of field. If your frames are shot with a wider aperture, the subject will be sharp while your background stays soft.

In the example on the left, each of the four frames has slightly different focus points: the top two are more to the front of the bee, and the bottom two are more to the center and far side.



Photograph by Lisa Cannon

Final stacked version

After the frames are stacked, the final image shows a sharp bee with the soft background still intact. I created the final image using a program I purchased called Helicon Focus. Photoshop also has a module to create these as well.

◆ **Key Lesson:** Post-processing software can be another great tool to help create your images.



Photographs by Lisa Cannon

Top: Honeybee with flash; Bottom: Honeybee without flash

USING FLASH

As I've mentioned before, macro photography can require more light because of the larger apertures that are often used. When shooting insects on a bright summer day, that may seem to make little sense, but remember that you may be shooting in areas with lots of vegetation, shady areas, or even directly into flowers. You can use a small reflector to help bounce light into the frame, or you can use a flash.


There are many types of dedicated macro flashes that you can purchase, but a standard speedlight and a diffuser to soften the light will work just fine. Diffusers are available in different sizes and prices; if you decide to purchase one, I suggest you do some research online to find your best option. I don't shoot insects with flash often, so I chose not to invest in an expensive or bulky diffuser. I purchased a small fabric type that slips over my lens and folds so I can keep it in my pocket or camera bag.

Adding flash does not have to be complicated. As long as your flash has a TTL mode, you can set your camera as follows and get good results: shutter speed of 1/200, aperture of f/8, and ISO of 200-400.

Because I rarely use flash, I choose shooting conditions to favor natural light, and my camera handles high ISO values really well. I don't find that adding flash makes enough difference in the images to entice me to carry the extra gear. As an example, the two images on the previous page were shot within about a minute of each other, the first with flash and the second without. The only difference in the settings is the ISO. The first is ISO 200, and the second is ISO 160.

As you can see, these images are very similar. The two things that I notice that are different are the lack

of shadows in the top image and the difference in color due to the different light sources. I can't say if I prefer one image over the other, but someone else may have a different opinion. As with most things in photography, there is no right or wrong answer - there is only personal preference.

 **Key Lesson:** Adding a flash and diffuser to your kit can help you add light to your images. I encourage you to try it if you can.



Photograph by Lisa Cannon

Hummingbird moth

DON'T LET PERFECTION BE THE ENEMY OF GOOD

Now that I've shared my top tips to help you create the best images you can, I want to mention one last thing. I started this guide by reminding you to be patient when you head out to capture insect images, and I am ending it by saying this: not every single image you keep and share has to be perfect. Sometimes the story of the image is more important. Here is a personal example.

While enjoying an afternoon in a public flower garden last summer with my daughter, I heard her say, "Mum, what is that?" I looked to where she was pointing and saw an insect I had never seen before nor knew what it was. I did my best to switch my camera settings to ones I hoped were better suited to shooting a flying insect and tracked the creature for several minutes before it disappeared.

We used my images later to identify the creature as a clearwing Hummingbird moth. Neither of us had heard of it before, and we felt fortunate to have seen it. It turned out my images of the moth are not perfect, but they are decent and have meaning to me. I may never see one of these creatures again, and the images remind me of an afternoon spent with my daughter. I'm also proud that I could make the changes in my camera quickly enough to capture what I did. These images don't need to be perfect for me to consider them keepers.



Photograph by Lisa Cannon

Hummingbird moth

◆ **Key Lesson:** Unless you are submitting your images for publication, they don't have to be perfect to be considered good or for you to be proud of them. I hope you'll consider that when reviewing your own images.

📖 **Recommended Reading:** If you'd like to improve your composition skills for better images, grab a copy of Photzy's best-selling premium guide: [Understanding Composition](#).



MY FINAL THOUGHTS

I hope I've inspired you to want to try creating insect images for yourself. Remember to be patient, gentle, and as least intrusive as you can. Your final images will be worth the effort.

Photograph by Lisa Cannon

Poppy and Mosquito



Photograph by Lisa Cannon

Self-Check Quiz:

- 1) What is the basic definition of macro photography?
- 2) Which of your settings can be set to Auto to help you get better results?
- 3) True or False - You need to travel to specialized locations to shoot insects.
- 4) True or False - A noisy image can still be a great image.
- 5) Is it necessary to use flash when photographing insects?
- 6) Does every image have to be perfect to be considered a "keeper"?

Learning Assignment:

If insect photography is new to you, I suggest taking some time to learn the basics of macro photography. It should give you some good skills to help you start. For your first few attempts, try to choose an area that you know has lots of insects to help increase your opportunities. Remember to be respectful of any natural areas you spend time in. You are the visitor in these creatures' homes!



Hey there!

Let's get real for a minute... Learning photography can be super challenging! But we're here to help you every step of the way! Here are 3 of our most useful (*and FREE!*) photography resources:



3 Free Photography Cheat Sheets

Grab 3 free photography cheat sheets that will help you understand the basics.

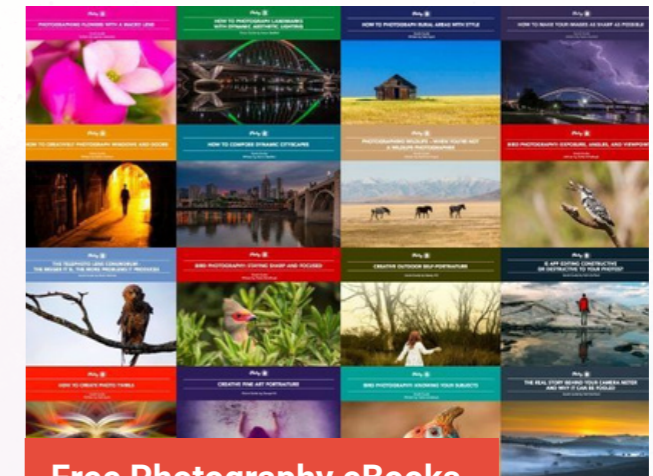
[Download Cheat Sheets →](#)



What is Your #1 Photography Killer?

Take this 30 second quiz to find out the #1 thing holding your photography back.

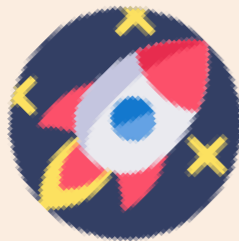
[Take Quiz →](#)



Free Photography eBooks

Free access to our library of 250+ downloadable (pdf) tutorials on everything you can imagine.

[Download eBooks →](#)



Want quick photography tips?

Check out our friends at DailyPhotoTips.com they'll send you 1. solid photography tip to your inbox, 5 days a week. So you can start your day right, with actionable tips to help you on your creative journey. [Subscribe now →](#) (free for a limited time)

ABOUT THE AUTHOR



Lisa Cannon is a hobbyist photographer, living and photographing in the prairie provinces of western Canada. She started getting serious about photography in 2012 after receiving a Canon Rebel xTi as a gift. It didn't take long for Lisa to find her photographic passions--sports and action, macro, and nature--and she combines these with her love of the outdoors to create images she's proud of.

Follow at <https://www.instagram.com/leavemymark2016/>

Congratulations! You've completed this Photzy guide!

If you liked this photography tutorial, check out this premium composition guide to help you better compose images: [Understanding Composition](#).



**IF YOU'D LIKE TO CONTINUE
LEARNING AND IMPROVING
YOUR PHOTOGRAPHY PLEASE
VISIT PHOTZY.COM**
