

HINTS AND TIPS FOR DRAMATIC SPIDER WEB PHOTOS

Quick Guide
Written by Charles Haacker




Spiders are beautiful arachnids that build amazing traps for their food: insects. The spider is our friend. My long-suffering arachnophobic adult son has heard that all his life. He won't kill a spider if he can possibly help it, but he also prefers to let Dad gently capture and evict it (it'll come right back anyway, but I don't tell him).

Spiders eat the bad bugs, including mosquitoes, which are known disease vectors. Spiders eat more insects than birds and bats combined!

The spider rarely bites, and if it does it is because it perceives danger and is defending itself. It doesn't want to waste venom on something it can't eat.

In this article, we'll seek out the "orb weavers" with their beautiful geometric webs. We will cover:

- where the spiders are,
- light and better times of the day,
- equipment,
- tools and techniques, and
- exposure and focus.

 **Recommended Reading:** Improve your photography by working better with light. Grab a copy of Photzy's best-selling premium guide, [Understanding Light Book One](#).



Photograph by Charles Haacker

A cross-lit golden garden spider, covered in dewdrops, maintains her web in the early morning.

WHERE THE SPIDERS ARE


Spiders shouldn't be hard to find as it's estimated that every acre of land has about a million of them. Early morning is a good time to look because of low sun and, if you're really lucky, bright dew on their webs.

All spiders spin silk, but not all spiders make webs. I am so impressed by the ability of these tiny creatures to create their wonderfully engineered traps, all alone, over and over. Many build a web a day, abandoning yesterday's and beginning anew the next morning.

Orb weaver spiders create the complex geometric webs that we look for ('orb' means 'circular' in this context). There are some 2,800 species of orb weavers, the third largest family of spiders after the jumping spiders and the sheet weavers that make sheet-like webs.

One obvious challenge in photographing spider webs is that spider silk is incredibly fine, about 1/10 the diameter of a hair on your head. The whole point of a spider web is to make it near invisible to insects that the spider hopes will blunder into it. That's good for the spider, bad for the insect, and challenging for photographers.

The first rule of spider web photography is to **get in close**. You need to magnify the strands in order to see them. There are many ways to accomplish this with nearly any camera.

 **Key Lesson:** Spiders are everywhere. Finding them isn't difficult; finding them where the light works best is the tricky part. The Golden Hours are best because of low, slanting sun and easier-to-find back and cross light.



Photograph by Charles Haacker

A cat-faced spider, about the size of a U.S. nickel.

LIGHT AND BETTER TIMES OF THE DAY

Full Frontal Specular (Hard) Light (Sun Over the Shoulder)

This is a not-great spider web shot taken with my cell phone. The cat-faced spider is fine, about life-size, but we cannot see much of the silk because the light is wrong (harsh, unfiltered sun coming from subject front). If the background weren't dark you wouldn't see silk at all. That's the whole idea from the spider's perspective, but we want to see it so we can shoot it. The spider set up shop under the lip of our big trash can, but it was trash day. It was a get-it-now shot or it'd be gone, spooked when the bin was moved.

It's not bad, except it shows how *not* to photograph spider webs. Some of its stringers do reflect some of the bright sunlight, but there's much more of the web that is as invisible to us as it would be for the hoped-for breakfast.



Photograph by Charles Haacker

A golden garden spider, emphasizing its signature zig-zag stabilimentum.

Indirect Soft Light (Skylight or Overcast)

This is a common yellow or “golden” garden spider, *Argiope aurantia*, the “zig-zag” spider. The challenge here was the location, her web tucked way back in a shaded corner where two brick walls met at right angles.

The soft, indirect sky light was fine for the spider, but not great for lighting a web that the spider doesn't want her dinner guests to see.

If you look closely you can see *some* of the web reflecting some of the soft light. You can especially see the signature zig-zag *stabilimentum*. According to Wikipedia:

"The web of the yellow garden spider is distinctive: a circular shape up to 2 feet (60 cm) in diameter, with a dense zigzag of silk, known as a stabilimentum, in the center. The purpose of the stabilimentum is disputed. It is possible that it acts as camouflage for the spider lurking in the web's center ..."

When I shot this, I was after the spider rather than the web, and I was happy with the picture. I could have tried to set off the web by lightly fogging it from a trigger bottle, or even blowing some talcum powder into it, but doing so would unethically disrupt the life of the spider!



Photograph by Charles Haacker

One tiny spider did this overnight, from a tree (out of frame) to the antenna on my car, all by itself.

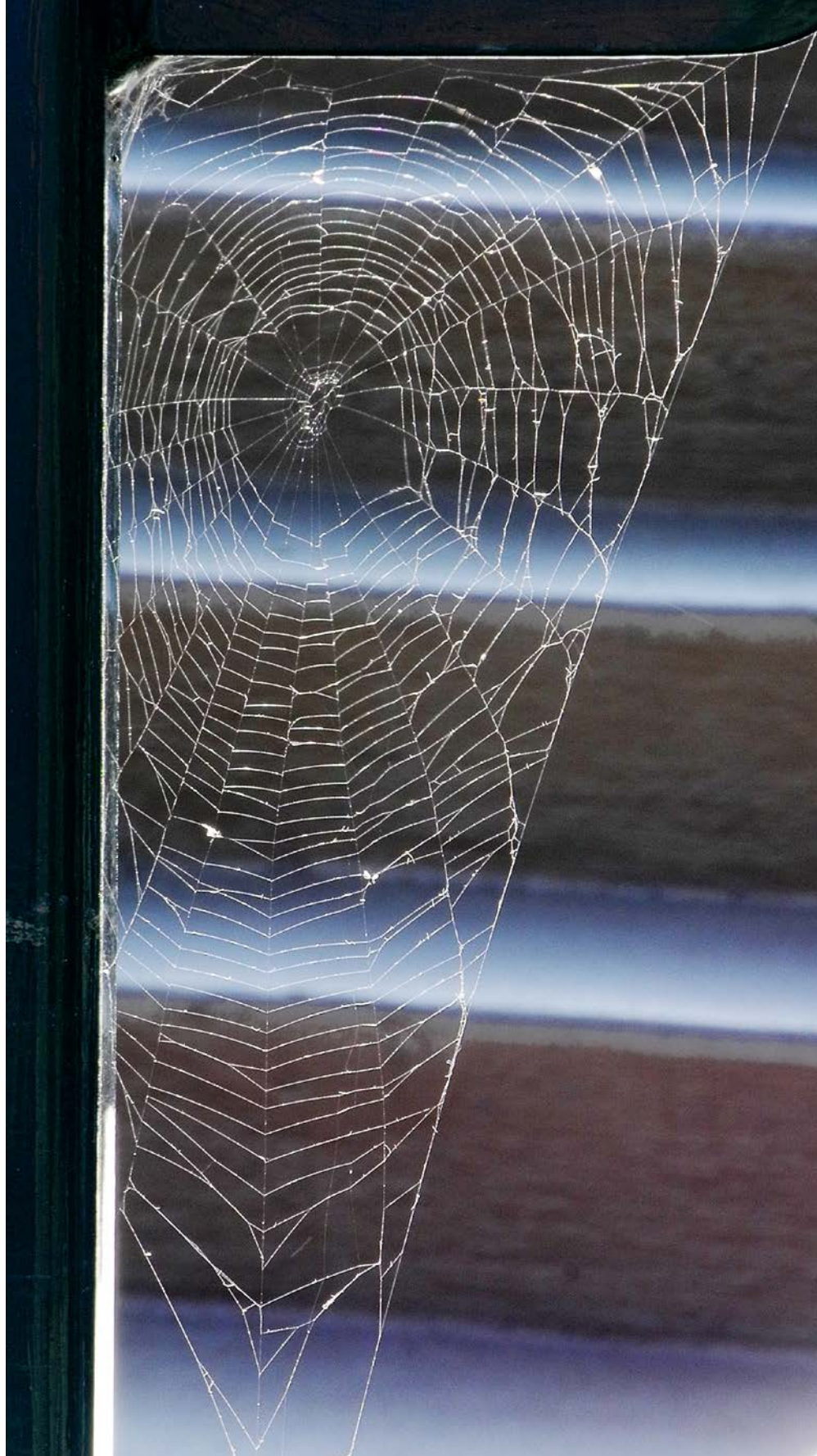
Back Light (Light Coming from Behind the Subject Toward the Camera)

Just after sunrise in a campground I saw this huge flag of cobweb (a term for an abandoned web) rigged from a tree to the radio aerial of my car.



Photograph by Charles Haacker
Backlit cobweb on a stair railing.

It is backlit, a bright web against a darker background. If you can see it, you should be able to photograph it. I shot in raw, which gives more options in post-processing, but that's not mandatory. Note that the web stands out best where the background is darkest, less well where it's lighter, and disappears altogether wherever the silk crosses a bright area.



Photograph by Charles Haacker

Backlit cobweb on a stair railing enhanced in Photoshop.

Here's a dusty cobweb. The fine dust helps separate it from the background. The bright but early sun is coming toward the camera (watch out for flare). The original JPEG looks pretty good!

But the original lacks "snap" (plus no crackle or pop). I enhanced it in post-processing using both Lightroom and Photoshop in tandem.

Separation of tones was increased by raising the highlight values and reducing the shadows in Lightroom. Then I took it into Photoshop and selected *only* the strands of the web (tricky but doable) and raised their value even higher.

I could wish I'd shot this raw. It's pretty "noisy" (lots of digital grain in the background), but overall I think it's a success.



Photograph by Charles Haacker

Backlit golden spider sparkling in dewdrops in the rising sun.

THE LEGENDARY GOLDEN HOURS

I think **the very best light for spider webs** is during the **Golden Hours**, the hour or so right after sunrise and before sunset. They are called 'golden' because much of the blue light is scattered, which increases the intensity of the red-yellow-orange component.

Because the sun is low in the sky it's easy to get it behind or crossing the webs. Plus, right after sunrise you may get a bonus: dewdrops!

This photo was taken right after sunrise on the tallgrass prairie. The heavy dew was sopping. My socks were soaked in minutes.

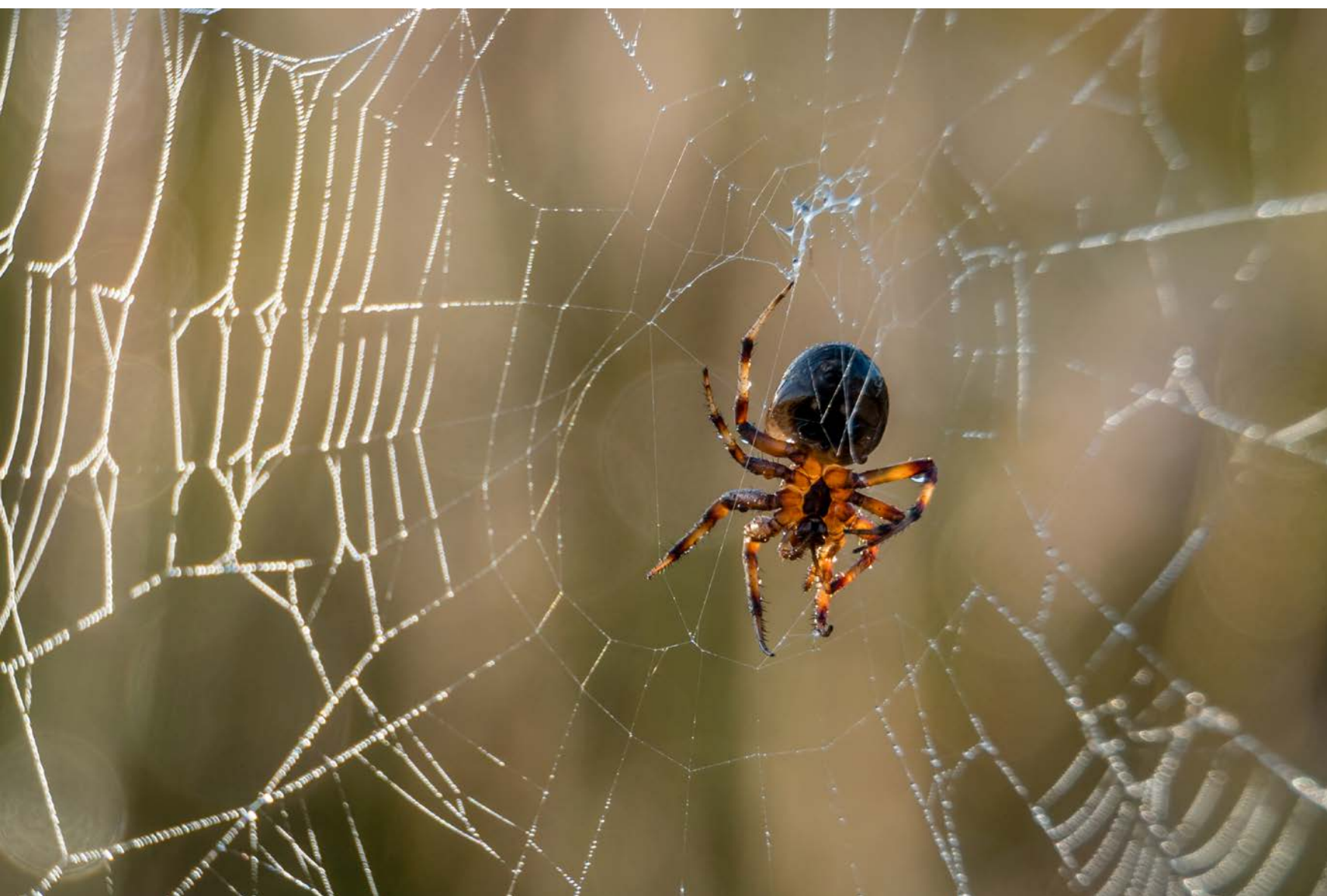


Photograph by Charles Haacker

Crop of the same backlit golden spider with her load of dewdrops.

There had been a recent “ballooning” hatch of golden garden spiders. There were hundreds visible and probably thousands invisible. The visible ones were literally dripping “diamonds” of dewdrops, both on them and their webs. Notice how the strongly backlit wet webbing stands out at the left margin of the picture even though it is out of the zone of sharpest focus.

This is a crop. I wanted to really show up those diamond dewdrops. She has probably double her body weight in water on her.

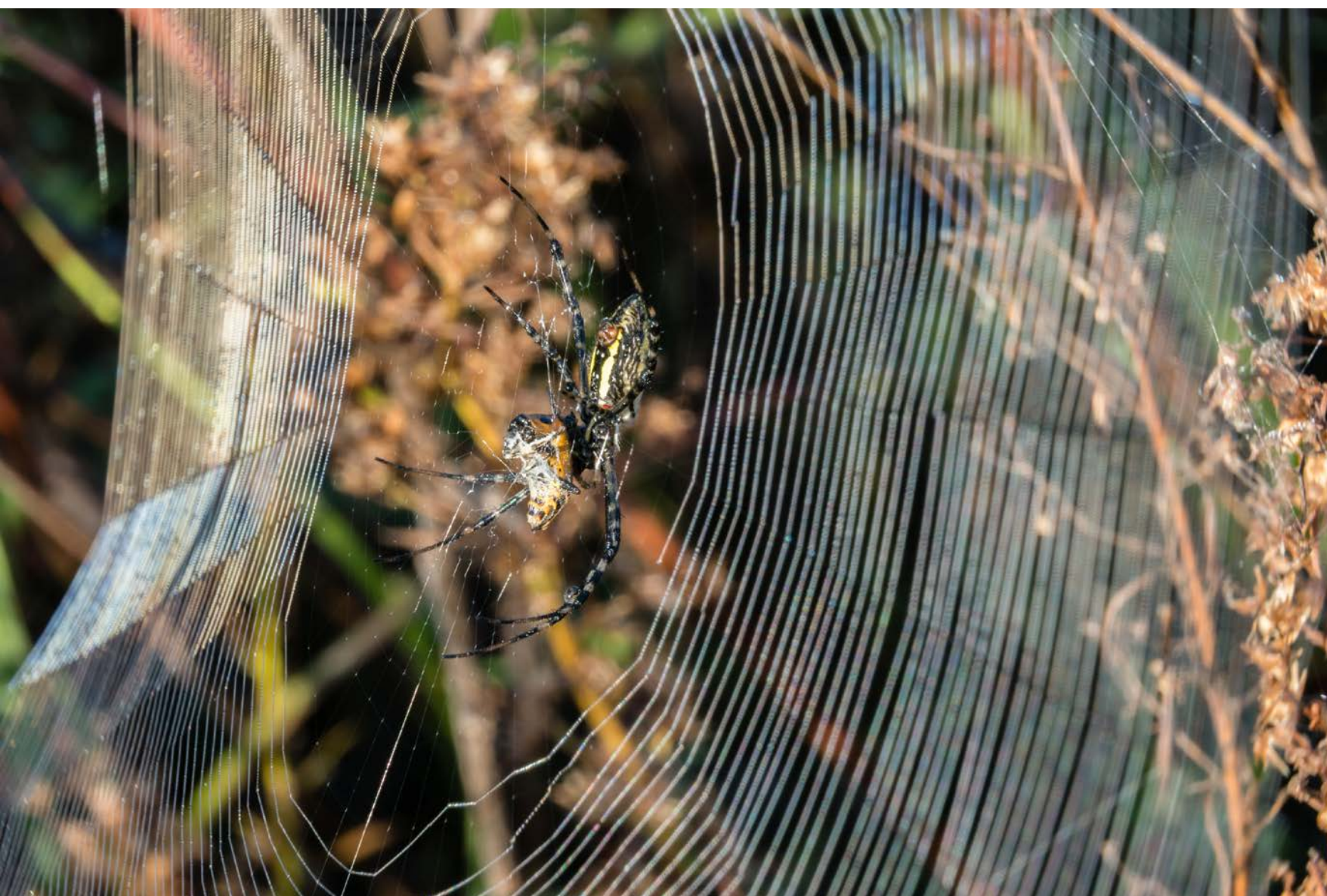


Photograph by Charles Haacker

Backlit and glowing in the sunrise.

This cobweb spider (*Steatoda*, or “false widow”) is also carrying a mass of water that caused her web to be “lit up like a new saloon,” as my late wife used to say.

This really shows off the web, and the spider herself is gleaming gold from the sun flaming her like stained glass. If you look closely you can see the individual beads of dew on the lines even where the focus is soft. The increasing warmth will quickly evaporate the dew and the web will become nearly invisible again.



Photograph by Charles Haacker


CROSS LIGHT: This one is cross-lit from left-front. The web is lit up because of the heavy dew, but this happy golden garden spider has herself a yummy breakfast of an unlucky honeybee.




Photograph by Charles Haacker

A crop of the same shot showing the globules of water on the webbing, legs, and abdomen of the spider.

INSTANT DEW: Carry a small mister or trigger bottle with water to simulate “dew” on webs. I have not tried it, but I have an idea that misting a web with the spider in it is apt to spook her. If it’s an abandoned cobweb it would certainly work. You could also take some talcum powder up in a blower and “dust” the web. Anything you do, though, you should do sparingly. You can add but you can’t subtract. Carry a plastic bag to cover the camera if you “dew” or dust so it doesn’t get on the lens.

 **Key Lesson:** Spider silk becomes more visible in low, bright, cross, or back light. Dew or dust can help set off the silk to make it more visible. A brighter web against a darker background is easier to see. If you can see it, you can photograph it. The easier you can see it, the easier the camera can, too.

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WHAT SPECIAL EQUIPMENT DO I NEED?

Camera

Not being facetious; pretty much any camera will do. My personal *least* favorite camera is the phone because I find it clumsy and limiting, but I have long insisted that cameras don't matter; they can make the job easier or harder, but in the end they just record a scene.

Most point-and-shoots will do a credible job because most have built-in close-up capability, plus better lenses and real optical zoom. If you are after the web as well as the spider, you often don't need to get super close.

The close-up function on a point-and-shoot will actually work at *any* focal length. Most will get you closest at the widest angle of the zoom, but you can get surprisingly close, plus get better perspective and *bokeh*, by working further away.

One challenge with point-and-shoots (P&S) is that their tiny sensors use short focal-length lenses. They have great depth of field (the apparent zone of sharpness in front of and behind the subject focused upon). If you zoom out in close-up mode you can stand away from the scene and still get a magnified shot, plus the background will fall out of focus more easily (*bokeh*) to make the web stand out.

Lenses

A dedicated macro lens is the best choice if you have an interchangeable lens camera, but bought new they can be in the \$600-\$800 range.

Supplemental Screw-In Close-Up Lenses

There are inexpensive supplemental *diopter* lenses that can be screwed into your lens like a filter. They are on the opposite end of the image-quality scale from true macro lenses.

They are inexpensive because they are simple lenses. They are only center-sharp, falling off dramatically toward the edges, but they cost little and take up little room in the bag. They will work with lenses of any focal length plus zooms. They are not great, but they will get you closer for not a lot of money.



Photograph by Charles Haacker

A +2 diopter lens shot with a +1. They often come in sets of three.

Extension Rings or Tubes (Poor Man's Macro)

If your camera has interchangeable lenses but you feel that the cost of a dedicated macro lens is daunting, I am currently using a set of **extension rings** costing under \$30 USD. They are also lightweight and take up little room in the bag.



Photograph by Charles Haacker

Exploded view of automatic extension tubes.

All of the dewy spider web shots shown here were made with one of the tubes seen in the picture, using my 18-105mm $f/4.0$ zoom.

Tubes are not even optical; they are *spacers* that move the lens further from the sensor which makes it focus closer. Sharpness depends on the lens you use. A true macro is superior, but I like the light weight and keep-it-simple (and inexpensive) aspect of tubes. Mine are automatic and have all the contacts to hook up with the body so I don't have to do complex math in my head for exposure compensation. Automatics are well worth the extra cost.



Photograph by Charles Haacker

Cropping within reasonable limits will get the job done. The inset shows the original.

Cropping (Not Best, But It Works)

There is also the option of getting as close as your camera will permit and then cropping the rest of the way.

Key Lesson: Camera and equipment need not be expensive or complex. Most point-and-shoot cameras have enough built-in close-up capability to do a fine job out of the box. Using interchangeable lens cameras does not mean you must spend \$800 for a dedicated macro lens. Supplemental lenses or extension tubes are light, take up little room in the bag, and do a creditable job within their limitations.

OTHER TOOLS AND TECHNIQUES

Tripod or Hand-Held?

You can hand-hold the camera, and sometimes it's the only way to get the camera where it needs to be. A lot of photographers will insist that a tripod is mandatory when you are in close. They are not wrong; the steadier the camera, the sharper the shot. But tripods are sometimes a nuisance plus "one more thing."

My preference is to let my ISO "float" (auto ISO). I can keep my shutter high to have a better chance of a sharp shot. I also shoot short bursts. When you are in very close, your focus is critical and the DOF is very shallow. Very small errors mean un-sharp photos. Shooting digital, it costs nothing to shoot extra.

A tripod absolutely allows you to hold your ISO down for less noise (digital grain) plus keeps the camera rock-steady. (If your camera has any sort of image stabilization you should *disable it* whenever the camera is on a steady platform such as a tripod, beanbag, car top, etc.; otherwise you may get smeared shots because the system may "hunt" for motion that isn't there, inducing motion of its own.) The downside is positioning a tripod. It lacks flexibility. I think it may even interfere with creativity.

I rarely use a tripod. I long-ago adopted the KISS principle (Keep It Simple, Stupid). Having spent too many years *schlepping* around tons of gear, I try to pare it down to the camera, a zoom lens, and a monopod, but you need to use what works for you. I want to be loose and able to easily change the composition, focus, and framing, whereas a tripod tends to restrict me, being quite literally rigid.

Monopod

Lately I have been using a monopod, which is just one leg of a tripod. It is not as stabilizing as a tripod but is much better than hand-holding. It will give you a surprising amount of extra steadiness. I leave my stabilization ON when using it.



Photograph by Charles Haacker

“Wye yoke” meant for stabilizing a firearm works equally well with a lens.

Mine has a shooter’s “wye” or “vee” yoke. It’s intended as a rest for a firearm, but it works wonderfully with a camera, allowing me to switch from horizontal to vertical to hand-held and back in less time than it takes to explain. The wye is much more practical and flexible than putting a ball or pan head on a monopod, plus it allows greater creative freedom than a tripod.

All the dewdrop spiders were made with this exact monopod and yoke. In tall grass it’s much easier to lean a monopod in than it is to try to set up a tripod. I still allow for higher ISOs to keep shutter speeds up while also using smaller f /numbers for depth of field. When you are in close at high magnification, your DOF falls off dramatically.

💎 **Key Lesson:** Tripods may be counterproductive, but a monopod is a good compromise instead of shaky hand-holding. Putting your ISO in auto allows for faster hand-held shutter speed, but the tradeoff may be “noise.”

FOCUSING

Focusing is tricky. We are so accustomed to autofocus nailing it almost every time, but it may not work well (or at all) in extreme close-up. It tries to focus on something finer than your own hair. It's apt to focus past it at something distant.

If the spider is home, most autofocusing will go straight to it. You may need to stop down more than usual because the closer you are, the less DOF you have. I like to shoot around $f/8$ with a "half frame" (APS-C) sensor. Point-and-shoots can have an advantage with their short focal lengths.

If the camera seems unable to focus, it probably can't "see" anything to focus on. If your camera has manual focus this may be the time to use it. An old trick is to substitute focus on something nearby, lock it in, then move the whole camera in and out on your spider and web until it becomes sharp. This works very well in live view, plus there is no reason not to make several exposures as insurance.

NOISE? (DIGITAL “GRAIN”)

Little P&Ss in auto mode will usually pick a high shutter with a corresponding high ISO, which will likely lead to noise in the shadows.

Very generally the larger your sensor, the less that noise is a problem, and if you post-process (and you should; I never show anything that has not been processed) you can control noise to a reasonable level.

My current primary is a mirrorless Sony A6300 with a “half frame” APS-C sensor (half the size of a full-frame 36x24mm sensor). It’s actually the biggest sensor I’ve ever had and I find it keeps noise down and sharpness up, but the camera is a little pricey and I will never tell you that you must rush out and spend the rent on a camera. The camera you have will almost certainly do the job; you just may need to do some workarounds.

SHOULD I USE A LENS HOOD?

I always use a lens hood, and I highly recommend it if you have the right one for your lens (the wrong one can *vignette*, or darken the corners). However, when shooting into bright light it may not do much good if the light bypasses the hood and strikes the lens. I do NOT recommend using a “protective” filter, especially in back light, or your risk of flare goes way up.

EXPOSURE, FOCUSING, AND METERING


Backlight needn't be difficult. The glowing backgrounds and separation of the web from the background is so lovely. Most of us are relying on our in-camera meters and automation; I will never be "that guy" who calls you lazy for not going full manual. My experience is that matrix metering does very well, bracketing is always an option, and raw gives more room for error than JPEG.


I do suggest *shooting raw* simply because it is better, but I'm no purist there either.

"Chimping" sounds pejorative because it is. Checking your shot is a *tool*; use it.

Shooting with extension tubes used to be trickier but if you have an automatic set there is no headache-inducing computation necessary. They can be used individually or stacked for greater magnification.

I use mirrorless cameras and love the live-view-all-the-time WYSIWYG aspect. Phones and point-and-shoots are mirrorless. A DSLR can be switched to live view, or just "chimp." In film days we couldn't do that and might arrive home with unusable pictures. I love digital because it has pretty much eliminated that.

 **Key Lesson:** Auto focus may not work at all. You may need to focus manually. A useful trick is to substitute focus on something nearby, lock it in, then move the entire camera and lens in and out as a unit until the web becomes sharp in the finder. It works best in live view.

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CONCLUSION

Spiders are everywhere but their webs are challenging to photograph because the spiders do not want the webs to be easily avoided by prey.

- Look for strong cross or back light
- Look for backgrounds darker than the web
- Go out early for low sun and possibly dew on the webs
- Equipment

- a. Almost any camera will suffice
- b. Getting in close is important
- c. Inexpensive diopter lenses overcome limitations
- d. Inexpensive extension tubes work well with any interchangeable lens camera
- e. Monopods are more flexible than tripods in field conditions

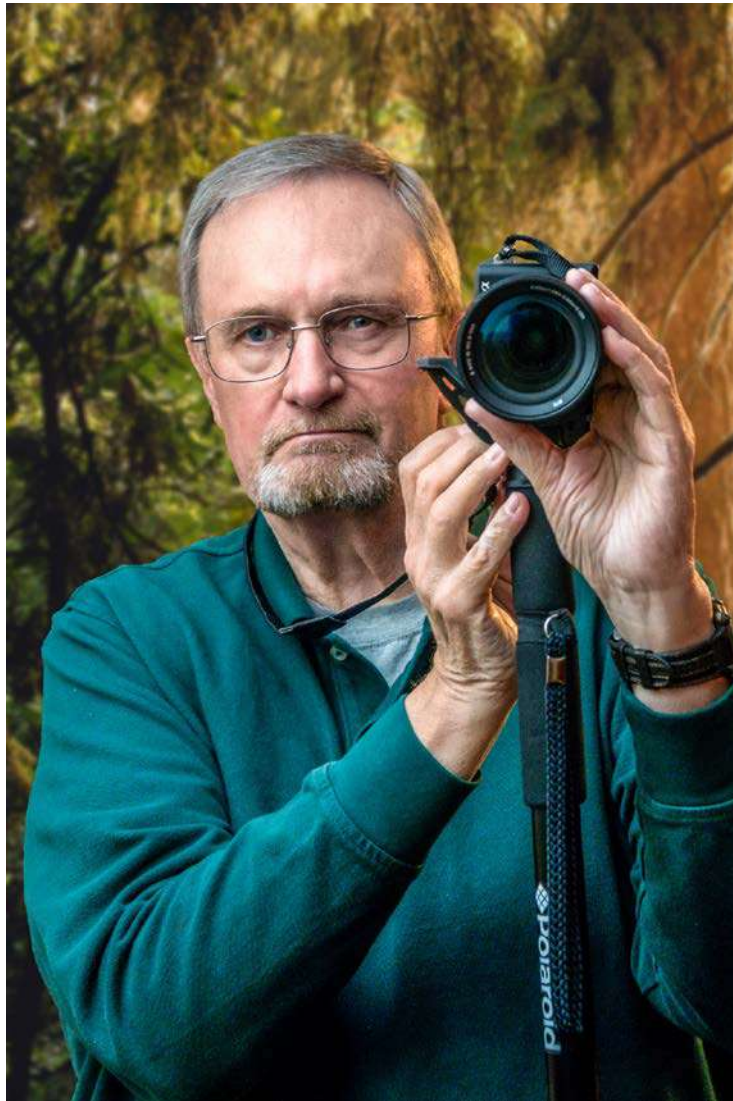
Self-Check Quiz:

1. True or False: Spiders are hard to find.
2. Is midday a good time to photograph spider webs?
3. What can make spider silk easier to see?
4. True or False: Bright full sun from over your shoulder is good for spider webs.
5. True or False: Spider webs are easier to see against a darker background.
6. True or False: You need expensive equipment for spider silk.
7. True or False: You need a dedicated macro lens to shoot spider silk.
8. Will supplemental "diopters" or extension tubes get you closer to a subject?
9. Tripods may be counterproductive, but a monopod is a good compromise instead of shaky hand-holding. Putting your ISO in auto allows for faster hand-held shutter speed but the tradeoff may be "noise."
10. Will a monopod help get sharper pictures?
11. True or False: High ISO may lead to more "noise" (digital "grain")
12. True or False: Auto-focus has no difficulty accurately focusing on spider silk.

Shooting Assignment:

- Get up early for low sun and **good cross or back light**
- Go right in your own backyard or nearby park
- Photograph a spider in its web
- OR photograph a cobweb (abandoned web)
- *Shoot more for the web than the spider*

ABOUT THE AUTHOR



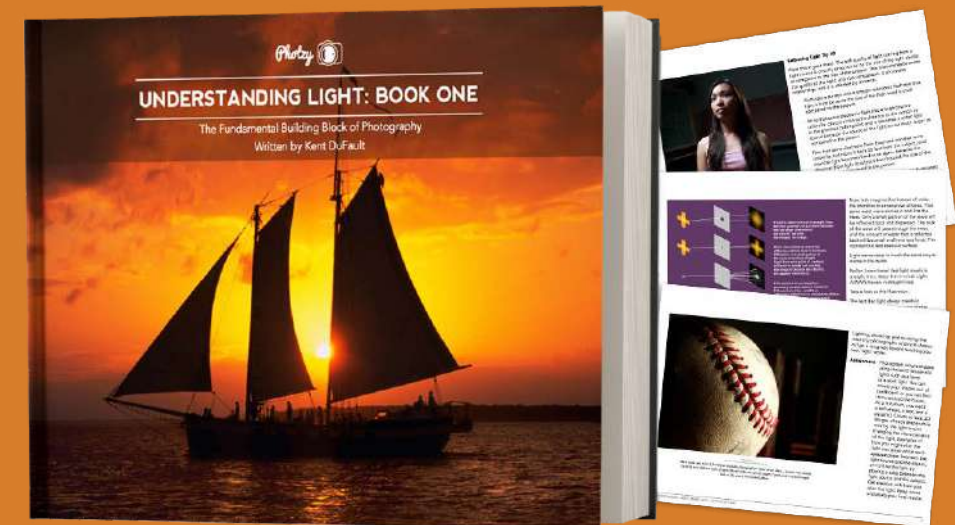
Charles Haacker graduated *Summa cum Laude* from *Laney College* in Oakland, California. He holds a degree, "Associate of Science in Commercial Photography." He worked as a professional photographer specializing in weddings, children, family, and business portraiture from 1968 until 1994. He also handled assignments in the corporate and industrial arenas. After retiring from his studio, he stays busy by donating his talents

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Flickr: <https://flic.kr/s/aHsjoEW9oR>.

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