

# *How to Photograph* **LIGHTNING** *Nature's Flash Unit*

by Milton Heiberg

**Lightning may strike anywhere**, and getting the dramatic image is relatively easy compared to other nature photography situations. If you've been a photographer for a while, you've probably heard the old photographer's secret of success: "f/8 and be there." This is absolutely true when photographing lightning with one big exception. The f/8 is especially good, but you don't want to be exactly *there*. Five miles away is close enough. So, how do you photograph lightning? If you have a place in mind that has a good vista, watch the weather reports and "be there" while the storm is passing.

The following procedure assumes a tripod, ISO 100 speed setting, and a dark night sky:

1. Set the aperture at f/8.
2. Focus at infinity, and autofocus off.
3. Set the shutter speed at "B" or "T."
4. Frame and aim the camera at the storm.
5. Hold the shutter open for one or more hits of lightning.
6. Close the shutter and advance to the next frame, repeat steps 1-5.



## Shoot at Night

**Photograph lightning during daylight** is next to impossible. There's too much light to slow down the shutter speed enough to capture lightning even under the dark clouds of a heavy storm. Lightning takes its own picture when and where it wants, and no matter how fast your reflexes are, it's gone before the shutter opens. If an image happens, it is either an accident, or the photographer was lucky enough to have a very long sequence of lightning hits at the same place. Almost all daylight situations can be very frustrating.

If you have a DSLR that will deliver anywhere from 4 to 10 frames per second, then set the camera on continuous. When the lightning strikes, hold the shutter release button down and hope that the lightning will be the flickering type. If luck is with you the results may be very pleasing.

The darker the sky, the longer the shutter is allowed to stay open at f/8. Therefore, your chances of getting a good photograph of lightning are best on a very dark night. In this situation you may leave the shutter open indefinitely and get multiple bolts in the same frame.

The intensity of the storm, your distance from it, and your film speed are variables. However, assuming the storm is approximately five miles away and your ISO is set at 100, f/8 is the best starting point aperture. Lightning will make an exposure at almost any aperture, but if you try to lengthen the exposure time by closing the aperture more, or by using neutral density filters, you risk getting images of the lightning bolts that are thinner than desirable. If the storm is more than five miles away, or filtered by smog, you might try opening the aperture to f/5.6. You should have ample time between bolts to check the viewing screen and make adjustments. If it is closer than three to five miles try f/11, but think of your safety first.

## Photographing At Dusk or Dawn

**Be near a storm with a wide horizon** and a visible sunset (or sunrise). As the sky gets darker (or before the pre-dawn gets too light) your time exposure becomes long enough to better your chances of lightning striking while the shutter is open (anywhere between two and ten seconds). In this situation, take a meter reading of the sky at a point within the storm clouds not too far above the sunset (or sunrise), but out of the bright area. Then, keeping f/8 constant, cut the shutter speed in half (equal to decreasing the exposure by one full f/stop). In other words, if the meter calls for an exposure of f/8 at six seconds, then set the exposure time to three seconds. This should give you a dark blue/gray sky that fades into almost black. Take meter readings frequently; the light at these times of day changes fast. You will probably get only one or two decent images, but that seems to be the case in most other situations of nature photography, so don't be too dismayed.

## Safety

**Good common sense should tell you to stay away** from the highest point, or to be under a tree that is likely to be hit and share the shock with you. Good advice would be to make your photograph within fifteen feet of your car. Or think about using a radio control or infra-red remote while sitting in the car. If you are working at the tripod and you feel goose bumps, or the hair on the back of your neck suddenly tingles, it is a sign that lightning may strike nearby. Jump in the car immediately.

### Lightning Facts

- \* Lightning is actually hotter than the surface of the sun -- in fact, it can be as much as three times hotter!
- \* An individual bolt can pack several hundred million volts at 10,000 amps, one trillion watts, briefly burning up more electrical power than is being used in the entire United States.
- \* To estimate how far away lightning is, count the seconds between seeing the flash and hearing the thunder. Each five seconds equals one mile.
- \* Lightning can be erratic. If you're closer to it than five miles, you can be struck. Take proper precautions when you photograph lightning.