

## Guide for the Milky Way Astro-Landscape Workshop



Image from 2023 Arkansas Dark Sky Festival

The 2024 Arkansas Dark Sky Festival will present a great opportunity to learn about the equipment and techniques necessary to photograph the Milky Way. The event is located at Bear Creek, which is rated as a Bortle Class 3 area, sufficiently dark to allow good imaging of the Milky Way.

The workshop will consist of hands-on sessions to occur in the location near the commuter parking lot as shown on the map below each clear night of the event, during which participants will image the Milky Way with their own equipment, and the following lectures:

Friday Evening 6:00 PM – Bear Creek Pavilion:

Lecture 1 - The basics of photographing the Milky Way.

What equipment is needed and basic camera settings. The exposure triangle and how to determine and evaluate proper exposure. Focusing techniques in the dark.

Lecture 2 - Planning for a successful Milky Way shoot.

Understanding Milky Way seasonality and the best months to shoot the Milky Way. How the Bortle classification of your location affects Milky Way intensity. The best nights to shoot the Milky Way. Using planning apps to ensure a successful shoot.

Saturday Evening 6:00 PM – Bear Creek Pavilion:

Lecture 3 – Advanced topics in Milky Way photography and Q&A.

Lighting the foreground through the use of natural and artificial light sources. Blended images using moonlit or blue-hour lit foregrounds. Noise mitigation through tracking, median stacking and/or software-based noise reduction.

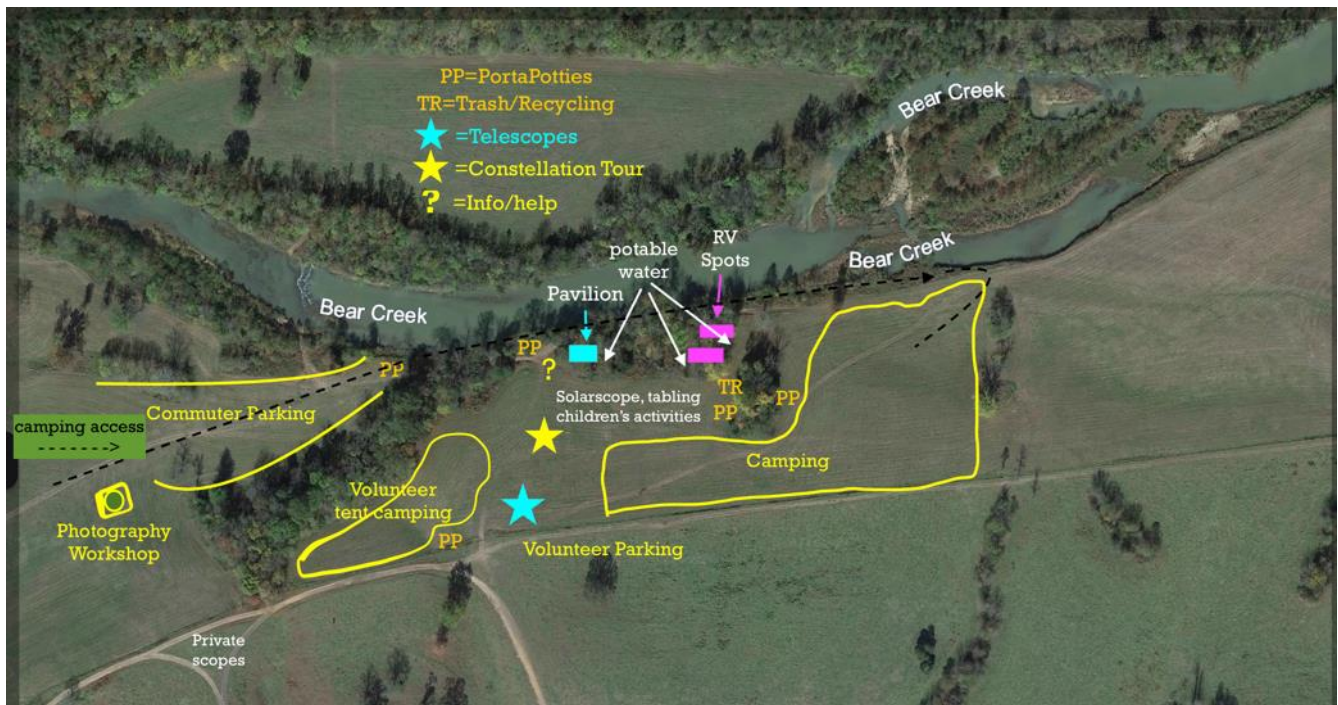
While attending all three lectures is not mandatory, doing so will give you a good grounding in the basic knowledge required to capture impressive Milky Way photographs successfully. Those who do not wish to participate in the hands-on field instruction will still find the lecture sessions interesting and informative.

The equipment that will be necessary to participate in the hands-on field instruction is:

- 1) DSLR or mirrorless camera, either full-frame or crop-sensor, with manual exposure control of your ISO, shutter speed, and aperture.
- 2) Wide angle lens, usually in the range of 14mm to 24mm (full-frame equivalent), f4.0 or lower aperture.
- 3) Sturdy tripod.
- 4) Headlamp and/or flashlight.
- 5) If the temperature is forecast to drop below the dew point, a dew heater or chemical hand warmers (with rubber bands) will prevent moisture from condensing on your lens.
- 6) PDF of your camera instruction manual downloaded to your smartphone.

The lectures will take place at the pavilion during the dinner break. The first two on Friday evening and the third, along with an extensive opportunity for Q&A on Saturday evening. The field instruction will occur just west of the commuter parking area, as indicated on the ground map below. Arrive no later than 7:45 as nautical twilight ends at ~ 7:55.

**2024 Arkansas Dark Sky Festival Grounds Map**



Registering for the Milky Way workshop will allow us to prepare for the anticipated number of participants properly. After registering for the Festival, you can register for the [workshop here](#).

Any questions specifically concerning the Milky Way photography workshop can be directed to Hal Mitzenmacher at [hal@mitzenmacher.net](mailto:hal@mitzenmacher.net).