

Dark-Sky Festival Guide Oct. 21 & 22 (Updated 9/20/22)

LOCATION

The principal activities of the festival will occur at the **Tyler Bend campground** pavilion on the Buffalo National River, a designated International dark-sky park. Information about the festival and participating organizations, and sales of celestial scavenger hunt materials and other relevant items, including raffle tickets for a set of binoculars, will take place at the **Silver Hill Float Service** near the entrance to the park on Highway 65, north of Marshall.¹ A third-party food truck and coffee wagon are also planning to be at the Silver Hill location. Please do plan to visit the Silver Hill venue during the festival.



ACTIVITIES

The centerpiece of this event will be the nighttime programming. Beginning with a guided naked-eye tour of the principal constellations of the Fall sky seasoned with classic mythology followed by a “star party” in which telescopic views will be shared of the major planets and deep-sky objects - galaxies, open clusters, globular clusters, nebulae, stars that are dying and being born. As a bonus, the event falls near the peak of the annual Orionid meteor shower. Finally, avid participants with binoculars can pursue, find and observe a list of prominent celestial objects in a **celestial scavenger hunt**.²

If it is cloudy, we will not despair, as there will be engaging alternative programming lined up for each night.

The daytime programming will include lectures, demonstrations, interactive activities, and opportunities to visit with volunteers in diverse “Let’s Talk About” sessions scattered around the venue. Topics ranging from how to bird-safe your home, light your home responsibly, use telescopes and binoculars for sky watching, or taking night sky photos are scheduled. Activities will range from a children’s celestial art contest, stomp rocket, and giant bubble blowing to demonstrations of fluid dynamics, energy, and geology. See the schedule below for more details.

¹ The raffle is a fundraising activity for the benefit of the NWA Space STEM project. More information available at the Silver Hill station and this website: <https://www.nwa.space>.

² There is always the potential to spot a random meteor under a naturally dark sky. A meteor shower occurs when the earth passes through a stream of dust usually left by a comet in the past producing a number of “falling stars” that appear emanate from a particular area in the sky. Most meteor showers are best viewed after midnight. The Orionids typically peak at around ten to twenty meteors per hour. These are fast meteors, often leaving lingering trails and sometimes bright fireballs. The festival nights will be just past the predicted peak.

Accommodations – where to stay

While the Tyler Bend campground is fully reserved as of this writing, the Festival webpage has a section on [where to stay, eat, and other things to see](#). There are campgrounds, RV parks, cabins, and vacation rentals in the area.

PREPARATION

Dress warmer than you think. People so rarely spend time out of doors after dark anymore that they fail to realize how much colder it feels when the sun goes down. Also, bring something warm to **drink and a snack**, especially if you plan to stay up past the guided star party to view the meteor shower or pursue the celestial scavenger hunt on your own.³

It takes twenty minutes or more to **fully dark adapt your eyes**. Exposure to white light will erase deep dark adaption in a flash. So, white light flashlights and cameras with flashes are not to be used. Unless you want to use a sky chart or record observations, none of which is essential to enjoy the constellation tour or the star party, you can do without a flashlight. But, if you want one, it needs to be either red or amber in color. These can be readily purchased online or in some larger retail outlets that carry flashlights. Arts & craft stores typically carry red film that you can apply to a regular flashlight. However, the easiest solution is to buy one of the little keychain flashlights on the [Festival webpage store](#), which come with a neck lanyard and sky chart of the October sky. Order now online, and we will have them at the Silver Hill location for you to pick up. Don't count on picking these up if you have not pre-ordered as supplies are limited. While you are at it, you might reserve a copy of Learn the Constellations as well. We will ship them to you before the event for a small fee if you like, or pick them up at Silver Hill.

Binoculars are great for sky watching but not needed during the organized program. However, after the program, they could be used with a sky chart, the Learn the Constellations Booket, or smartphone app to do your own exploring or to participate in the celestial scavenger hunt. They are of no value in meteor watching.

The organized program of the festival ends each night at 10:00. Anyone planning to observe after the program, meteor shower watchers especially, will want some kind of **ground blanket, sleeping bag, mat, or reclining chair**. The circle in front of the visitor's center will be available for meteor watchers to lay out, as will the Homestead field at the top of the ridge. These are entirely on your own activities.

Program Schedule Outline: (Note: numbers in parentheses are keyed to the event location map below. Please check back ten days out for any final adjustments to the schedule.)

³ The only telescopes allowed on the field are those brought by the volunteers who are sharing views with the public. Telescope volunteers are welcome. If that interests you go here to [register as a volunteer](#).

➤ **Silver Hill Float Center - Open Friday 4:00 – 7:00 PM, Saturday 11:00 AM – 1:00 PM & 5:00 – 7:00 PM**

- Information: Event news, event guides, and various informative handouts. (Note: general event information will also be available at the pavilion site, but not all handouts will be.)
- Sales: Observing kits (flashlights, lanyards, guides), Eclipse glasses, perhaps some clothing items, bird-safe window materials (Audubon), sky charts, celestial scavenger hunt, and binocular Raffle tickets (NWA Space fundraiser). As noted best to order the observing kits in advance and pick them up at the event.
- Third-party services: Ol’Barts Southern Eats food truck and Blue Sail coffee trailer.

➤ **Tyler Bend Pavilion – Friday:**

- 4:00 PM, let’s Talk Show-N-Tell tabling open:
 - Telescopes (1)
 - Solar Telescope (CAAS) (2)
 - Nightscape photography contest (3)
 - Library telescopes & Nature at night (NCAMN)(12)
 - Meteorites (ASGC)(11)
 - 2024 Solar Eclipse (CAAS & BRCD)(10)
 - Birds, amphibians, and light pollution & bird-safe homes (AR & Greater Ozark Audubon & Lights-out Heartland)(14)
 - Private Land Conservation in the Buffalo River Valley (BRF) (13)
 - Responsible lighting (ANSA) (15)
- Audio Visual Presentations (4):
 - 4:15 – Welcome remarks (Jeff Hoeper)
 - 4:30 – What’s up tonight, the celestial scavenger hunt and using binoculars (Rocky Togni)
 - 5:00 – The birth and death of stars (Bruce McMath)
 - 5:30 - Observing celestial objects through a telescope, (etiquette, don’t move it, use averted vision, avoid white light, & how to watch a meteor shower (Michael Borrelli)
- 5:45 PM, Closing the daytime program – what to expect tonight (Jeff Hoeper).
- 6:00 – 7:30 PM, Dinner break
- 7:30 PM Constellation tour begins (1 & 6) (N.T. ends 7:23)(Darrell Heath & Dr. Barth)
- 7:50 PM Telescopic views begin (1 & 6) (astronomical twilight ends 7:52)
- 7:50 PM Nightscape photography workshop (7)
- 10:00 PM, Formal star party, ends; on your own observing continues (Watch for meteors, learn the constellations, pursue the celestial scavenger hunt).

➤ **Tyler Bend Pavilion – Saturday:**

12:45 PM, let’s Talk Show-N-Tell tabling open:

- Telescopes (1)
- Solar Telescope (CAAS) (2)
- Nightscape photography contest (3)

- Library telescopes & Nature at night (NCAMN)(12)
 - Meteorites (ASGC)(11)
 - 2024 Solar Eclipse (CAAS & BRDCD)(10)
 - Birds, amphibians, and light pollution & bird-safe homes (AR & Greater Ozark Audubon & Lights-out Heartland)(14)
 - Private Land Conservation in the Buffalo River Valley (BRF) (13)
 - Responsible lighting (ANSA) (15)
 - Audio Visual Presentations (4)
 - 12:45 - Welcome remarks (Jeff Hoyer)
 - 1:00 - The birth and death of stars (Bruce McMath)
 - 1:30 - Birds After Dark -Learn what birds do during a typical October night (Jack Stewart).
 - 2:00 - The Resurrection of a Giant Refractor – (Kent Marts)
 - 2:30 - Buffalo River Foundation: Conservation Easements, Acquisitions, and Dark Skies (Ross Noland)
 - 3:00 - Observing 2024 solar eclipse (Carl Freyaldenhoven)
 - 3:30 - Lights out Heartland (Don Ficken)*
 - 4:00 - Beginning nightscape photography (Eric Stinnet)
 - 4:30 - Pollinators and light pollution (Casey Johansson)*
 - 5:00 - The Hunt for Planet B (documentary on James Webb and six key women scientists behind the development)
 - Children’s (of all ages) programs:
 - 1:30 - Children’s celestial art (3)
 - 2:15 – 3:15
 - ◆ Stomp Rockets & Bubble Blowing (7)
 - ◆ Stem Cluster (fluid dynamics, energy & geology) (3)
 - 3:30 - Children’s celestial art (3)
 - 4:15 – 5:15
 - ◆ Stomp Rockets & Bubble Blowing (7)
 - ◆ Stem Cluster (fluid dynamics, energy & geology) (3)
 - The Model Solar System (Darrell Heath) (8)
 - 6:00 PM Dinner
 - 7:30 PM Constellation tour begins (1 & 6) (N.T. ends 7:23)(Darrell Heath & Dr. Daniel Barth) 7:50 Nightscape photography workshop (7)
 - 7:50 PM Telescopic views begin (1 & 6)(astronomical twilight ends 7:52)
 - 10:00 PM, Formal star party, ends; on your own observing continues (Watch for meteors, learn the constellations, pursue the celestial scavenger hunt).
- CLOUDY NIGHT PROGRAMMING – Possible offerings, not final.
- A million, billion, trillion (Dr. Daniel Barth)
 - A very brief history of observational astronomy (Jeff Hoyer)
 - About BNR Dark-Sky designation and program (Park Ranger)
 - The Naming of stars (Bruce McMath)

- Gilbert's quest for responsible lighting (Mitch Mortvedt and Bruce McMath)
- How to measure your sky's light pollution level and report it as a citizen scientist (Bruce McMath)
- An Owl Prowl, wolves spiders and glow worm search, a night moth survey.

