# 2016 Cherry Springs Dark Sky Park Report

## **General Information**

## **Contact Information**

Park Operations Manager – Ben Stone Hills Creek State Park 111 Spillway Road Wellsboro PA 16901 Telephone 570-724-4246 E-mail bestone@pa.gov

Dark Sky Park Status Level Gold Level

Number of site visitors in the last year

Total Attendance September 2016 – August 2017 123,619

Assistant Park Manager – Scott M. Morgan Lyman Run State Park 454 Lyman Run Road Galeton PA 16922 Telephone 814-435-5011 E-mail smmorgan@pa.gov

Night Sky Attendance

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	2017
Public Night Sky Programs	13,945
Astronomer overnight	3,641
Non Astronomer night Sky Viewing	78,041
Non-personal Daytime Astronomy Interpretation	10,040
Rustic Camping**	10,466
Total Night Sky Attendance	106,036
Total Park	123,619

\*\* Cherry Springs State Park's Campground was at full capacity for 48 days this camping season. Since our campgrounds reach capacity we have been recommending visitors to camp at other local parks. Our overflow campground at Patterson State Park is routinely filled with visitors for Cherry Springs. Lyman Run State Park Ole Bull State Park, Kettle Creek State Park, and Sinnemahoning State Park benefits from the attraction of Cherry Springs and definitely sees attendance increases due to Cherry Springs popularity. The Susquehannock State Forest District Forester, Christopher Nicholas, also approached me to inform me that he has seen a marked increase in calls from visitors requesting camping permits in the Susquehannock State Forest so that visitors can attend park programs and stargaze at Cherry Springs.

Lighting

All lighting is 100% full cut off and compliant with the outdoor lighting guidelines and the Management Plan Night Sky Objectives.

# Sky Quality 2017

Numerous Unihedron Sky Quality Meter Readings

Unihedron Sky Quality Meter Readings				
May	Sky Conditions	Time	Reading	Precip
18	Overcast		N/A	
19	Overcast		N/A	
20	Overcast		N/A	
21	Overcast		N/A	Rain
22	Clear	2330	21.61	
23	Clear	0200	21.7	
June				
17	Mostly Cloudy		N/A	
18	Overcast		N/A	Rain
19	Overcast		N/A	Rain
20	Mostly Cloudy		N/A	
21	Clear	2310	21.73	
22	Clear	0140	21.57	
23	Overcast		N/A	
24	Clear	2325	21.59	
25	Clear	0050	21.63	
	Clear	2330	21.78	
26	Clear	0149	21.63	
27	Poor Conditions		N/A	
28	Clear	0000	21.77	
	Clear	0100	21.7	
July				
15	Clear	2250	21.71	
16	Cloudy		N/A	
18	Clear	0035	21.61	
	Clear	2330	21.46	
19	Clear	0115	21.46	
-	Clear	2350	21.68	
20	Clear	1015	21.6	
21	Cloudy		N/A	
22	Overcast		N/A	Rain
23	Overcast		N/A	Rain
24	Overcast		N/A	

\*Average of 21.63 with a standard deviation from 21.54 to 21.73

# **Funding**

Operational funding is provided by general funds from the Pennsylvania State Budget allocation to Bureau of State Parks.

## **Cherry Springs Dark Sky Fund/Association**

The Cherry Springs Dark Sky Fund (A Pennsylvania Parks and Forestry Foundation Friends Group) continues to be a critically important partner with Dark Sky Fund donations used to enhance the stargazing and astronomy experience at Cherry Springs State Park. Donations have been used to educate local residents and visitors about the value of the night sky resource and why it needs to be preserved.

## Arts and Culture

In 2017 the park offered two Arts and Cultural events.

The first event, "Oh My Stars" featured a performance by the Endless Mountain Music Festival (EMMF) Brass Quintet - EMMF co-sponsored the event. The concert was followed by stargazing.

The second event, due to its popularity was the return of PA Wilds Juried Artisan Curt Weinhold and his Nightscapes Photography Workshop Series.

## **Oh My Stars**

Sunday, July 30, 8:00pm to 11:00pm

"The Endless Mountain Music Festival's concert returns for the 3rd summer with "Oh, My Stars" ! The brass quintet and percussionist will perform a series of astronomy-inspired arrangements for this free concert. Following the concert, the park will offer a brief laser-guided sky tour and limited telescopes will be available.

This is a FREE part of the EMMF concert series especially designed for children and seniors. All for the cooler weather at the park. The works of Gustav Holst, Scott Joplin, and the ever popular John Phillip Sousa (among others) will be featured. After a short intermission, a special Night Sky Tour will conclude your evening under the stars."

## Nightscapes Photography Workshop Series

Photograph the starry night sky with your DSLR camera & lenses you currently own. Curt Weinhold, a PA Wilds Juried Artisan, teaches you to photograph constellations & the Milky Way. Foreground material, as trees or buildings may also add to the composition. Some photo gear essential to this would include a digital camera which allows removable lenses (DSLR) and a tripod. Strongly recommend a fully charged camera battery and a spare battery if available and a memory card. This is NOT for those wishing to photograph through a telescope. Clear nights are cool so bring a jacket. Class is approximately 2 hours in length. We may travel to two or more locations near Cherry Springs.

## **Outreach**

## **Public Outreach-**

- Light Pollution outreach to the surrounding local communities.
- Meeting with local land owner groups providing good lighting fixtures information and brochure's
- Continue the local Public Library Star Gazing Loaner Trunk Program to Galeton and Ulysses
- Continue to work with other Park organizations to provide advice and guidance in developing their respective night sky public areas.

## **Programming-**

Public stargazing programs are presented by park educational staff and dark sky team volunteers every Friday and Saturday night Memorial Day weekend though Labor Day weekend and Saturday night programs were offered from early April to Memorial Day weekend and from Labor Day until the end of October. Since its designation in 2008, attendance for the park's evening programs and stargazing has grown to unprecedented numbers.

In an effort to address the large crowds and their impact on the night sky and program quality we hired two additional interns who received academic credit towards their degree program. Additionally Night Sky Tour programming continued on Sunday evenings and select weeknights during the months of July and August.

Public Night Sky Programs attendance for 2017 was 13,945 for 206 hours of scheduled night sky programming. This includes advertised programming as well as impromptu astronomy programming.

**Note:** The total number of visitors to Cherry Springs was 123,619 and it is estimated that close to 93% were exposed to some type of night sky message be it interpretive waysides, brochures, or informational pamphlets on astronomy/light pollution awareness.

Note on attendance – After the 2015 season, management realized that the prescribed formulas for determining park attendance were not sufficient to determine the visitation for the for the Public Programing/Viewing area. Coordinated efforts were taken by park staff during the 2016 season to determine if the formulas accurately depicted the number of visitors utilizing the park for casual stargazing. It was determined that we wholly underestimated the attendance in previous years. Due to this inaccuracy, management proposed a new attendance formula in August of 2016 that was approved by the Bureau of State Parks and initiated in February 2017 for the 2017 season. Due to this new attendance formula, the park staff will be utilizing this season as a new visitation baseline.

### Events

**Star Parties:** Two star parties are held at the park each year. These are pre-paid, pre-registered events hosted by Astronomy Clubs where over 500 astronomers gather to stargaze and listen to slated professional speakers. Astronomy vendors are also on site. These are either 2 - 3 day (night) events.

### "Black Forest Star Party"

The Black Forest Star Party (BFSP) is an annual dark-sky amateur astronomy observing event hosted by the Central Pennsylvania Observers (CPO). Held every year since 1999, the BFSP generally spans a weekend in the late summer or early fall at Cherry Springs State Park in Potter County, Pennsylvania.

### "Cherry Springs Star Party"

The Cherry Springs Star Party is an annual dark-sky amateur astronomy event that has been running every year in early to late June since 2005 at Cherry Springs State Park and is hosted by the Astronomical Society of Harrisburg, PA Incorporated (ASH).

## **Media Mentions**

# <u>http://www.msn.com/en-us/travel/news/the-most-beautiful-spot-in-every-us-state/ss-BBDpYIT?ocid=spartandhp#image=38</u>

"Cherry Springs is possibly the best spot for stargazing in all of the U.S. On a given night, 10,000 stars are visible to the naked eye."

### http://www.onlyinyourstate.com/pennsylvania/cherry-springs-state-park-in-pa/

"The Incredibly Rare State Park Hiding in Pennsylvania You'll Want to Visit" by "Beth"

### http://abc27.com/2017/08/16/adventure-pa-cherry-springs-state-park/

"Adventure PA: Cherry Springs State Park" by Kendra Nichols

## https://www.theguardian.com/environment/2016/aug/23/why-we-need-darkness-light-pollution-stars

"Fear of the light: why we need darkness" by Amanda Petrusich

## http://paenvironmentdaily.blogspot.com/2017/05/cherry-springs-state-park-moves-to.html

"Cherry Springs State Park Moves To Enhance Visitors' Dark Sky Experience" by David E. Hess

## Awards



Great Places Award – Cherry Springs State Park of Coudersport, PA (Potter County). Cherry Springs is one of the most unique destinations in the PA Wilds and it attracts thousands of tourists each year who come to the park to see one of the best star-filled skies in the country. It is designated by DCNR as a Dark Sky park and also had been given a Gold Level rating by the International Dark Sky Association. It is one of the few places left in the Eastern United States where over 6000 stars can be seen with the naked eye.

# **Partnerships**

https://visitpottertioga.com/explore/attractions/stargazing/



https://youtu.be/iMph-qJJmzc?t=147

## Galeton, PA – Gateway to the Dark Skies, Cherry Springs State Park

## https://www.gatewaytothedarkskies.com/

"Galeton embraces its location as the town that visitors pass through before making the ride up the mountains to Cherry Spring State Park. Stargazing brings many new visitors to our town. We are pleased to show off our period street lamps that meet Dark Sky standards. We are working on many initiatives that help preserve the Dark Skies and promote zero percent light pollution so that the experience is one that visitors will never forget."

https://www.youtube.com/watch?v=6dIzNUOdF E

# **Entrepreneur Mentions**

## https://straubbeer.com/adventure/stellar-night/

"A Gold Medalist at the 2017 Best of Craft Beer Awards, Stellar Night is named in honor of the iconic starry skies of Cherry Springs State Park in Potter County where the Milky Way shines so bright it casts your shadow. The Travel Channel even declared this location in the PA Wilds™ to be the "best place on earth."



# A Sampling of Visitors Comments

"One of nature's treasures" Reviewed 1 week ago

This is a treat for those not only interested in stargazing, but families looking for something different to entertain that is no cost and a great way to enjoy nature! If you log on to their website you can obtain the schedule on the best nights to view the sky. Take a blanket and snacks and enjoy the views provided to you by nature! It really makes you appreciate our world. Visited May 2017

https://www.tripadvisor.com/ShowUserReviews-g52427-d624813-r522250700-Cherry Springs State Park-Coudersport Potter County Pennsylvania.html#

"Stargazing with friends" Reviewed 3 weeks ago

I traveled 5 hours to this park to see the sky during a new moon. It was a little cloudy but obviously we have no control over the weather. The sky was absolutely amazing. We arrived before the sun set and that was an awesome sight to see as well. The darkest sky with the most stars I have ever seen. Shooting star every 4 minutes. Definitely would visit again. Stayed about 25 minutes away at Rough Cut Lodge and it was the most accommodating beautiful place. Visited August 2017

Famous for star gazing" Reviewed 3 weeks ago

The roads to the park offer nice views during the day, and the park is well designed to enhance star gazing, and offer lectures in an outdoor theater area, and seemed good for camping, but we had accommodations nearby, so we have enjoyed daytime and nighttime visits of no more than several hours at a time. The clarity of the night sky needs to be experienced to fully understand how many other areas have light pollution. We are only very amateur gazers, but we're so impressed by the last meteor shower occurring in August before the solar eclipse. It gets cold even in the summer, so be prepared to bundle up at night.

Visited August 2017

https://www.tripadvisor.com/ShowUserReviews-g52427-d624813-r517096410-Cherry Springs State Park-Coudersport Potter County Pennsylvania.html#

"Star-amazing!" Reviewed 3 weeks ago

Everyone needs to visit this place to see what the sky truly looks like without light pollution. There is nothing like it and it's totally worth the trip. We drove from Connecticut and had a new moon (dark) on 8-20-17. Bring binoculars with you to see even more. A real "bucket list" adventure! Visited August 2017

https://www.tripadvisor.com/ShowUserReviews-g52427-d624813-r516468217-Cherry\_Springs\_State\_Park-Coudersport\_Potter\_County\_Pennsylvania.html#

"Light Show" Reviewed August 13, 2017 via mobile

Spent about 5 hours on the public observation field for the Perseids meteor show, watched moonrise then headed out. Saw a good number of "shooting stars" and the milky way for the first time in years. It was cold, for August, had fleece blankets and sweat shirts and still got chilled, so be prepared. Beautiful sky, relaxing night.

If you go, please respect the red light rules, people with regular flash lights were very distracting. Red cellophane and rubber bands were provided the night I was there. Visited August 2017

https://www.tripadvisor.com/ShowUserReviews-g52427-d624813-r512186463-Cherry\_Springs\_State\_Park-Coudersport\_Potter\_County\_Pennsylvania.html# "Worth the drive" Reviewed July 30, 2017

Seeing the stars I used to see in my childhood and youth was like seeing old friends. Amazing. We went during the new moon so that we could see the Milky Way, but I would go back anytime. It's a short walk from the parking lot to the field; it's wheelchair accessible, and it's an easy walk for children or people with knee problems. You can see the beautiful stars from anywhere in Potter County, but what is especially nice about the park is that people come with telescopes, and there is a park ranger available to answer questions, If you don't have your own red flashlight (easy to get online), then the park provides red cellophane for covering your own flashlight. It's all free. Thank you, Pennsylvania state park system! Visited July 2017

https://www.tripadvisor.com/ShowUserReviews-g52427-d624813-r506998546-Cherry\_Springs\_State\_Park-Coudersport\_Potter\_County\_Pennsylvania.html#

Fantastic - a must do "Dark sky gazing"!!!" Reviewed May 30, 2017

I had never heard of a dark sky state park before, so we registered for the educational program of star gazing. We arrived before dark, brought our camp chairs, red cellophane and rubber bands to cover cell phone screens and flashlights lens, binoculars, bug spray and some snacks. The park rangers were well prepared for visitors. They directed where to park and how to park( headlights facing away from viewing park). The Park Ranger - Educator was very sweet and knowledgible. The program officially started at 930 pm but prior to that the Rangers pointed out planets as they became visible and the space station as it flew by. Once the education program begin we were introduced to constellations thru a very entertaining story telling by the Ranger Educator. Green lasers were used to help locate different constellations. Also, the Rangers set up four telescopes to view Juniper and other stars. We stayed well past the formal program just to enjoy the HUGE amount of stars visible. It was chilly at night, recommend bring extra layers and blanket. It is very remote and dark driving when leaving be careful of animals crossing the roads.

Visited May 2017

https://www.tripadvisor.com/ShowUserReviews-g52427-d624813-r489243996-Cherry Springs State Park-Coudersport Potter County Pennsylvania.html#

"Stars for days!" Reviewed May 30, 2017

On our last day in Coudersport, we ventured to Cherry Springs State Park to hike the short, 1-mile loop around the park and to check out the stargazing site. The hike was short but nice. The stargazing field is a large grassy area with a small amphitheater with bench seating. The field used to be a landing strip. There are light-blocking mounds around the field. We returned at night since it was supposed to be partly clear. There were about 6 people total looking at the stars. A gentleman who works for the park service brought a telescope and was explaining to the group which stars, planets, nebulas, and galaxies were visible and would focus them for us to view on the telescope. The sky was absolutely beautiful and we were able to see Jupiter's moons and it's unique markings, a nebula, multiple shooting stars, and more. The experience was awesome and something we would like to do again. It really helped having someone from the park service there with a telescope for us to view. Visited May 2017

"Great place for solitude and stars" Reviewed February 23, 2017 via mobile

I lucked out and went to the park on a crystal clear but warm-ish late winter night. It was muddy and some snow on the ground still but the temperature was in the 50Fs. There were very few people there and I got there just before dusk. There was just one star in the sky. There are picnic tables and good quality seating around the park and there is a main area set out a bit like a lecture space. The stars were amazing. Everyone was quiet and well behaved. Such a treat to see the stars again so clearly. Visited February 2017

https://www.tripadvisor.com/ShowUserReviews-g52427-d624813-r462348158-Cherry\_Springs\_State\_Park-Coudersport\_Potter\_County\_Pennsylvania.html#

## Youtube Reviews!!!

Review by Astrobackyard

https://www.youtube.com/watch?v=6cnl78MS jw Keep an eye open at 4:51.

And his website review:

https://astrobackyard.com/cherry-springs-star-party-2017/

## **\*\*Fond Farewells**

And finally, this season saw the retirement of Hills Creek State Park Complex's long time Park Operations Manager Harry "Chip" Harrison. Chip, was instrumental in leading the development of Cherry Springs State Park as one of the east coast's premier dark sky destinations. With the guidance of the IDA, numerous astronomers, and Cherry Springs' own Friends group the Dark Sky Fund, Chip was able to convince the Pennsylvania Department of Conservation and Natural Resources (DCNR) to declare Cherry Springs State Park as the first Dark Sky Park in the Commonwealth in the year 2000. Chip also partnered and educated the leaders of the local communities of Coudersport and Galeton, local businesses, and utility companies to understand the importance of the dark sky natural resource and the negative effects of light pollution. With hard work and determination both communities and businesses retrofitted all street lighting to dark sky compliant fixtures and utility companies changed company policy and procedures to protect the night sky. This significantly reduced the sky glow and reduced their respective light domes on the horizon surrounding Cherry Springs.

Hills Creek State Park Complex staff would like to wish Chip a fond farewell and thank-you for your mentorship and guidance over the last 21 seasons.