

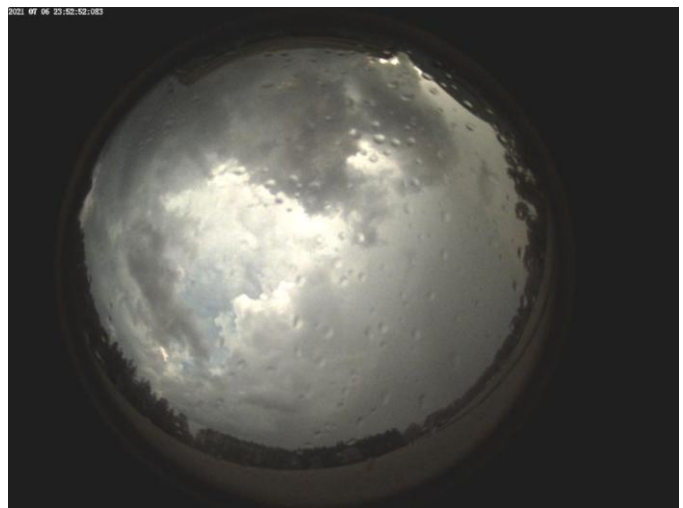
Cherry Springs State Park - July, 2021

After a nearly two year pandemic related hiatus, I finally was ready for a trip to my favorite place - Cherry Springs State Park! The weather forecast wasn't very positive, but still, I was determined to go. Waited till the after the 4th of July holiday to give the 'astro-tourist' crowd time to head back home and for the park to clean things up.

Tuesday 07/06/2021:

Waited till mid-morning to leave so as to avoid the Pittsburgh back-to-work rush hour. The temp was already hot, heading toward the 90's range later that day. Cherry Springs would hopefully be a little cooler. It was fun seeing all the old 'sights' along the way on the drive up to the park. (the crashed green 'aliens' are still up to their antics just past the intersection in Penfield). While I encountered orange-cone flowers along the way on both Rt555 and First Branch Road, with new bridges going in over the creeks, for the most part the drive thru the forests was scenic and peaceful.

Arrived at the park mid-afternoon to find a freshly mowed field with just a handful of amateur astronomers. The usual section of the field, (between Orion & Cygnus Way), that the Kiski Astronomers and our friends from the eastern US and Canada congregate was completely empty! I had the pick of the spots and pulled my little Tab teardrop camper into one of the 'prime' spots in the field. Spent the next several hours setting up camp and telescope while dodging several quick rain showers that passed over.



I had everything ready for the evening in time for a leisurely dinner and even had time for a stroll over to the southwestern field where the majority of amateurs were setup and visited with Elliot from NY, and ORAS members John & Kelly O. Also met Leon, an amateur from Connecticut.

At sunset, the sky cleared so I uncovered the telescope and completed balancing the mount in RA & Dec, along with running the USB cables and connecting the laptop. Soon, I was 'collecting' time-lapse images with the allsky cam (ZWO ASI224MC & fisheye lens in a DIY dome), and had my 'guttercam' running (Samsung SDC435 analog security camera & widefield lens in a drain-gutter enclosure) that I use to monitor the main telescope as it slews. My main telescope that I use for traveling is an 8" Celestron SCT optical tube @ f6.3 with a ZWO ASI294MC Pro camera on an Atlas EQ GEM mount, along with a Canon CCTV 25-100mm zoom lens and ASI290MC camera, and a 60mm Antares refractor guidescope with an ASI120MC camera, both piggybacked on top of the 8" SCT.

Once dark enough to see Polaris, I quickly mechanically polar aligned the Atlas Gem mount using my Polemaster Camera and completed a 3-star GOTO alignment using the mounts Skysynd hand-controller. The sky conditions weren't very good, scattered haze and what I later learned was wildfire smoke from the PNW made for a soft sky. I decided to spend the evening working on my widefield objects list <http://stellar-journeys.org/WideField-tour.htm> using the Canon Zoom lens and hunt objects over in Scorpius and Sagittarius. Spent the next several hours video-observing using the livestack feature of Sharpcap open clusters M6 and M7 near the Scorpions' tail, along with the starclouds of Sagittarius, M24 and Baades-Window. Had to be careful as most of the objects were due south and I was flirting with the mount doing a meridian flip while in the middle of taking an image. Throughout the evening, the dew was extremely heavy, that it was almost like a rain shower dripping off of my tent canopies. The telescope was getting a good soaking, but with the dew heater running on high, the optics stayed dry.



(M6)



(M7)



(Baades Window)



(M24 starcloud)

Finally, wanting to observe the region around Antares and Rho Oph, I sent the telescope over the meridian and promptly found my GOTO slews significantly off, with the telescope nowhere close to where I wanted it to go. After wasting a bit of time trying to figure out what was up with the mount, and manually slewing it around the western sky over to Arcturus and a few other bright stars and syncing on them, I realized that the EQMod software that I was using to control the Atlas mount still had the align-points loaded from when I was at the ORAS Observatory in June. Clearing out all that old data and doing a sync on a couple of stars resolved the GOTO issue and I moved back over to Antaries and M4.

Unfortunately, during all the flipping and flopping around I didn't notice that the power cord to the dew heater controller had come loose until the image I was livestacking began to look a little fuzzy. By the time I found the loose cord, it was too late to save the optics from dewing up. By then it was heading toward 2am, and with the previous long day in driving to Cherry Springs and setting up, I decided to call it a night for video-observing. I did grab a chair and my 12x50 Minolta Binoculars and spent some time wondering visually among the Milky-Way starclouds in Sagittarius and Scutum, along the way taking in M8 - the Lagoon Nebula, the bright globular M22, the Swan Nebula M17, and the Wild Duck Cluster M11. Turning my chair to the northeast, I continued to sweep-up the brighter Milky-Way clusters - M103 in Cassiopeia, the Double Cluster and the Alpha Persei cluster in Perseus. I then went deep into the universe with a extended view of the Andromeda Galaxy - M31, which filled the binocs eyepieces. As I was now felling a little dewy myself from sitting out under the stars, I folded-up the chair and headed in to bed.

Wednesday 07/07/2021:

Slept in till 9am when the warm camper woke me. After breakfast, I drove down to Lyman Run park to retrieve my Galaxy Pass from the ranger office. Once back up on the Cherry Springs mountain, I spent the day lounging around camp in the shade, trying to stay cool. Decided to take a mid-afternoon nap in the unlikely case it cleared that evening, but was soon woken-up by warning txt's from Denny and Dean back down near Pittsburgh about severe storms that had just torn thru the region and was heading my way. So I packed-away all non-essential outdoor camping and astronomy items and crossed my fingers that the storms would die-out before reaching the park. After dinner, with the severe weather having slowed down, I decided to stretch my legs and went for a walk across the road to visit the public section and outdoor planetarium. Not much looked to have changed over the last couple of years, with maybe a few more info signs around. I've always thought that the old airport runway would make a great observing field with its clear horizons.



I then walked over to the SW observing field to visit with the folks there, but the storm was finally beginning to move in, so I hurried back to camp. Fortunately, we had a bit of Cherry Springs weather luck, as the storm seemed to split in two, with the more severe stuff heading either to our North, or passing to our South.



But we finally did get a nice thunderstorm and rain. Spent the evening reading and watching the teevee.

Thursday 07/08/2021:

Woke to a grey, cool morning with occasional drizzle. Spent a little time reading and catching up on email. By noon, the sky had partly cleared and the field dried out, so I went for a hike along the trail that starts in the park, runs along the northern edge of the field and then loops toward the southwest. The park has done a nice job with keeping up the trail, with signs and blazes to keep you on the path.



After lunch, the rains returned to the observing field, so I stayed mostly inside the camper processing images from Tuesday night. (not that I do much processing, mostly a little cropping and resizing). For the rest of the afternoon and into the early evening, the skies remained drizzly. Finished reading the August Sky & Telescope, lots of good articles in that issue, and started in on a National Geographic magazine that I had. With showers continuing to fall, I resigned myself to another night of non-observing and switched on the TV. By 11pm I was beginning to get sleepy and started to get ready for bed. While checking the forecast for the next day, I realized that the satellite image was showing clearing skies overhead, and opening the camper door, I could see stars!!!

I quickly threw on my observing clothes and headed outside. Everything was sopping wet, but there wheeling overhead was the Summer Triangle of Vega, Deneb, and Altair poking thru a light haze, and the Milky-Way was attempting to break thru the soft sky. I hurriedly plugged-in the laptop and prepared my camper clamshell observing station, going as far as to hang-up the blackout curtains and pull out my observing notes. But then I thought better of continuing on to uncover the telescope. A breeze had kicked-up and soon dark clouds were racing in from the West. For the next 45 minutes I watched the sky alternate between clear, dark sucker holes and fast moving clouds. The weather radar didn't show any rain nearby, but having been rained on before at Cherry Springs by fast moving clouds, I held off and continued to just watch the sky. With the clouds beginning to become more widespread, I decided there would be no Cherry Springs 'magic' that night and put away the observing gear. Headed back in to bed.

Friday 07/08/2021:

Dawn brought a brighter, drier morning but the Sun was still obscured by a layer of haze and light clouds. The forecast called for scattered showers and sun during the day, with partial clearing later in the evening. Might get a few hours of observing in tonight! After breakfast, I went for a walk around the observing field, back to the southern edge where all the bleachers are kept for the Woodsmen show in August, and then over to the CCC dog-trot log shelter building.



I then went for a drive, first down to the old Keeners General Store, (now renamed to Cherry Springs General Store) for an ice-cream break, and then back along RT44 past the park a few miles down the road to the old fire-tower and stone CCC cabin.



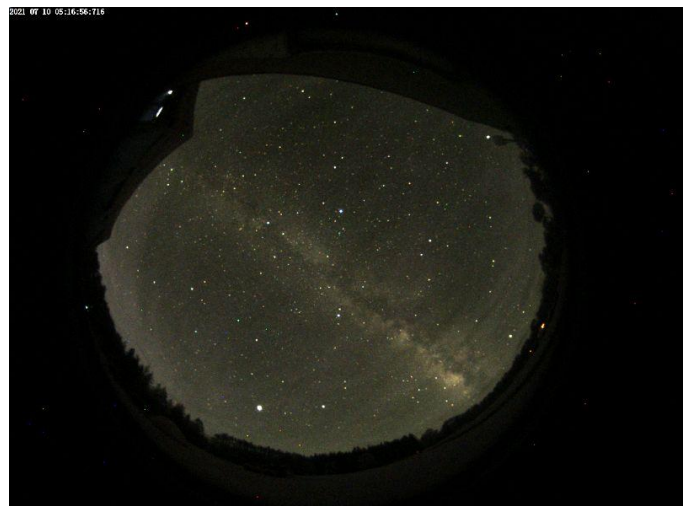
On the way back from the fire-tower, I stopped at the hilltop viewing pull-off on Rt44 to take in the vista of mountain ridges rolling into the distance:



Early afternoon, the weather began to greatly improve, bringing with it several dozen new campers that setup across and behind my site, including Tom and his better-half from Long Island NY. Also, several old friends including Tom & Kristy H, Eric L, and Roxanne arrived and setup down in the SW corner. And I met Steve from central PA who setup across from me in his new TAG teardrop, (smaller version of my TAB), which he gave me a quick tour of. With the prospects for observing that night, I pulled-out the black-out curtains from their storage cubby and re-hung them from the small canopy that covers the back clamshell hatch of the camper. Also uncovered the telescope and sorted my observing notes and guidebooks for the evening.

Took a stroll over to say hello to Eric and Tom, setup over near Leon, and while I was there, Leon demonstrated how to zenith balance a GEM that had an optical tube setup for Hyperstar. (I ended up loaning him a few of my heavy magnets to help offset new equipment that he had attached). As more casual looking 'astronomers' began to show-up, (no telescopes), I realized that tonight was one of the park's scheduled public nights, meaning it could get crazy with the lights. After dinner, I started up the allsky and gutter cams and chatted with various folk (Eric & Steve), who dropped by to visit. At dusk, with the air temp falling towards the mid 50's later that night, I changed into heavier clothing.

The few early evening clouds gave way to clear skies and I powered up the laptop and telescope. The Milky-Way, while at times a little soft, looked beautiful on the allsky cam throughout the night!



I continued my widefield project using the Canon zoom lens and ASI290MC camera with the remaining objects in Scorpius. These included Antares & globular cluster M4, and the bright, splashy open cluster NGC6732, (part of the Zeta Scorpii 'False Comet' region), along with Rho-Oph and the Pipe Nebula in Ophiuchus.



(Antares & M4)



(Antares & Rho Oph dark nebula)



(NGC6732)



(Pipe nebula)

While framing the widefield image for the 'Pipe', a large cloud bank rolled-in from the SW and obscured most of the southern sky for the next hour. But, around 1am, as predicted by the "Atmospheric" app, a clearing came thru and I was able to complete my observation of the dark nebula. Shortly afterwards, another round of clouds moved in and the sky closed down. After another 45 minutes of waiting with no signs of clearing, at 2:30am I called it a night and shutdown and covered up the telescope.

Saturday 07/010/2021:

Woke to a beautiful sunny morning! The weather forecast was for partly cloudy during the day, but clear at night. Then Sunday and Monday was back to rain, so I decided to make this my last night at Cherry Springs for this trip. Once breakfast was done, I packed-away the 10x10 canopy and a few other camping items. Spent the afternoon reading and preparing my observation plan for the evening. Tonight I would work on my HII Sharpless objects project using the 8" SCT and ASI294MC camera and the L-eNhanse narrowband filter. Got in a late afternoon nap. After dinner, I walked over to visit once last time with Eric who had his nice big refractor imaging rig uncovered, and Tom & Kristy H, and Roxanne who gave me a quick tour of her cargo trailer that she was converting into a astro-camper.

Once back at camp, I brought out the blackout curtains and uncovered the telescope and started-up the laptop and began collecting images with the allsky cam.

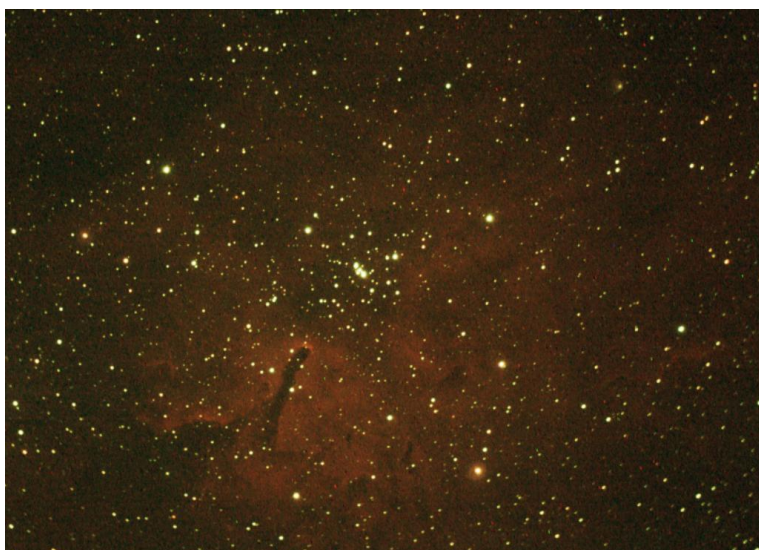


The sky at dusk looked very promising, but soon a light haze moved in softening first Arcturus in the west and then the region around Scorpius to the southwest. Still, it was a good night for the Milky-Way, and made for my best time-lapse video of the week.



[Cherry Springs July 2021 Milky-Way](#)

With the clearest section of the sky being overhead amongst the stars of the Summer Triangle, I decided to work the Sharpless nebula in Sagitta and Vulpecula. Started-off with SH2-86 and SH2-83 in Vulpecula, SH2-86 is a large bright HII region with open cluster NGC6823 embedded within it. I then hunted and video-observed several smaller and dimmer SH2's in Sagitta including SH2-80 and SH2-82, both of which displayed nicely using the L-eNhanse narrowband filter. SH2-82 is reminiscent of the Triffid Nebula, M20, in that it has a section of emission nebula bisected by dust, with a companion reflection nebula.



(SH2-86 & NGC6823)



(SH2-80)



(SH2-82)

I then switched gears and went galaxy hunting in Lyra for an interesting peculiar interacting galaxy called NGC6745. This object is a 3 galaxy pile-up on the interstellar interstate! At ~206 Mly. three galaxies are in the process of merging, with their cores still visible as separate features, giving the combined object the nickname:

"The Birds Head Galaxy".



(NGC6745)

Around 2:30am, the light haze began to thicken, and by 3am, the sky was gone. Not liking the looks of the weather radar, I decided to partly break down the telescope, packing away the cameras and optical tubes, leaving the mount & tripod for the morning. Also folded up and packed the blackout curtains along with my chair. And stopped the time-lapse and packed the allsky and gutter cams. Finally in bed by 4am.

Sunday 07/11/2021:

Woke early to a grey overcast sky and the sound of rain tapping on the camper roof. So glad I packed-up what I did before going to bed. About the time that I had finished breakfast and stowing away the camper interior, the shower ended and I headed outside to finish breaking down the mount and taking down the clamshell canopy. By 10am, I was ready to hit the road, so headed over to say goodbye to Eric, who along with several other folks was also packing up, and I began the long drive back to Pittsburgh, hoping to beat the storms later that afternoon.

So that wraps up my July 2021 trip report to Cherry Springs!
I hope to be back for the Black Forest Star Party in October.

Larry McHenry

Astronomical Webportal: <http://www.stellar-journeys.org/>