

## Cherry Springs Star Party - June, 2022

The wet weather we've been enjoying all spring continued into late May. After anxiously watching the forecast, I made the decision to head up early to Cherry Springs prior to the Memorial Day Holiday weekend and well in advance of the starparty, last held in 2019. Wanted to get the spot on the field that I normally setup in and was concerned that folks would fill the park over the holiday weekend and then stay for the starparty. Considering that the event sold out back at the end of March in less than two weeks, and with the Canadian border finally being open for casual travel, I figured it was going to be crowded this year. So I packed the camper for an extended stay and loaded the astro-equipment into the car.

### Wednesday 05/25/2022:

Was up early to finish a few last-minute items at home, and then waited for the Pittsburgh rush hour to subside before leaving for Cherry Springs. Was on the road by 9am, driving up I79 to Cranberry PA to stop for a visit with Kiski/ORAS buddy Bob K.



Bob couldn't make it to the star party, but he had a few items to sell, so I offered to take them up to Cherry Springs for him.

After visiting with Bob, I was back on the road, taking the long route up I79 to I80 and then east to Dubois. Having spent a fun time delayed by road construction near Brookville, I was happy to leave I80 and head northward towards the heart of Elk country - Bennezzette and Rt555. It's always a pleasant drive along this stretch of road, with the green effervescent hills rising steeply above the creek. The mostly sunny blue sky with an occasional white puffy cloud added to the scene.

I arrived at the park around 2:30pm and found another buddy from the Kiski/ORAS clubs, Denny H, just beginning to setup camp. (I enjoyed watching him drive around in circles for several minutes searching for the perfect spot, LOL). After pausing for a few minutes to say 'hello', we both spent the rest of the afternoon first getting our campers in order and then working on our telescopes. Denny setup his refractor/Gem imaging kit, while I assembled my telescope: an 8" Celestron SCT optical tube @ f6.3 with a ZWO ASI294MC Pro camera and filter wheel on an Atlas EQ GEM mount, along with a piggybacked Canon CCTV 25-100mm zoom lens with ASI290MC camera, and a 60mm Antaries refractor guidescope with an ASI120MC camera. I also setup a DIY Allsky cam, a ZWO ASI224MC & fisheye lens in a dome.

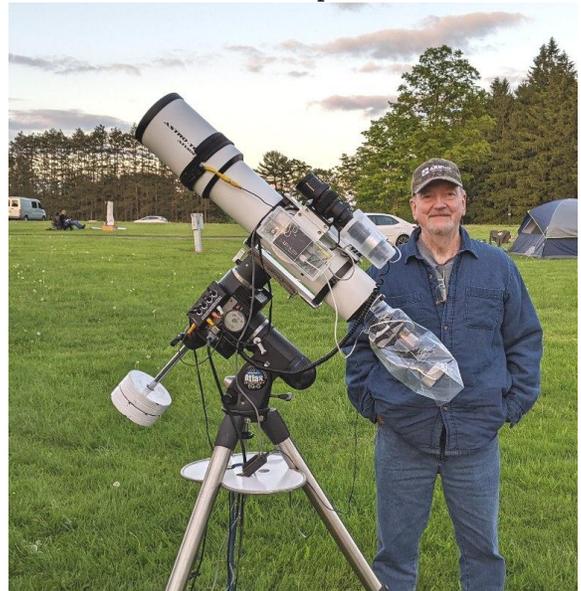


It felt good to be back at Cherry Springs. The observing field had just been freshly mowed and looked great, so there was no need for me to get out the weed-whacker that I had brought. There were just a few other amateur astronomers on the field, one of which was our friend Tom H, who came over to visit. Also one of the park rangers (Heather), stopped by to welcome us to the field, (and check our registrations). She informed us that this year the park was fully staffed, both rangers and maintenance staff. The rangers would be running 3 shifts, 24/7, between the three parks in their service area and to expect to see them there even at night. A welcome change!

Late in the afternoon, clouds began to thicken and by dusk, the sky was mostly overcast. Denny and I pulled out some chairs and sat outside his camper visiting and watching for the occasional star or partial constellation to pop thru a clear spot in the clouds for a few minutes. With a chill in the air, we finally headed indoors for the night. Back at my camper, I stayed up awhile longer to read, before nodding off.

#### **Thursday 05/26/2022:**

Up by 8am to a sunny sky that had cleared around dawn. But soon a light haze covered the sky that gradually thickened thru the day. The weather forecast called mostly for a repeat of yesterday, with partly sunny skies early, giving way to clouds by evening. I spent a little time in the morning setting up an old analog video camera on a tripod that I nicknamed 'GutterCam'. It's an old Samsung SDC435 vidcam & widefield lens housed inside a section of house drain gutter. I use it to monitor my telescope at night during meridian flips and slews. Late morning, Denny and I went for a hike along the trail that runs along the western edge of the observing field before heading into the forest. The park maintenance crew needs to make a few repairs as a small footbridge that crosses a gully along the path has several broken planks. After the hike, we also walked back to the southern edge of the field where the park is constructing a new pole shed to store their lawn equipment in. We also dropped in on Tom H to see his new camper.



After a drive down to Lyman Run Park and their showers, I spent the afternoon lounging around camp watching the clouds slowly build. During the day, several other campers arrived and setup across the road from us. Probably about eight of us astronomers there at that point. After dinner, Denny and I sat around outdoors for a bit, but once it became dark and with no clearings in sight, we headed indoors. I flipped on the TeVee and watched the local PBS stations while I organized a few files on my laptop. Another early to bed night.

#### **Friday 05/27/2022:**

Woken at 6am by heavy rain and wind. Then fell back to sleep till 8am. (according to Denny, the rain had started around 3am). It was a dreary grey morning, but surprisingly not very chilly. Had a leisurely breakfast and then visited with Denny. Around 11am, it began to drizzle, so I headed indoors to read and write.

At noon, the spritz went to a steady rain which lasted on and off for the next couple hours. Finally, mid-afternoon, the rain stopped and the sky became partly sunny and began drying off the field. Denny and I drove over to the Cherry Springs Country Store. (the old Keeners general store & gas station), for an ice-cream cone and to check-out their latest Cherry Springs clothing. Around 5:45pm, our friend from Delaware, Tracy N arrived and setup his R-Pod camper across from Denny. More amateurs had also been pulling-in throughout the day, including Paul, Brad, and Mark from the York area.



Once Tracy had settled-in, Denny fixed a large pot of spaghetti, for which I supplied the Italian bread, and the three of us enjoyed a nice dinner on the field and watched the sunset. Before the sun went down, we were treated to a very bright double rainbow to our east. By then, the sky had mostly cleared and it looked like we were going to get several hours of possibly usable sky. So at dusk, Denny and I uncovered our telescopes, (Tracy was going to wait till the morning to set his up), and waited for Polaris to appear.



To our west and east, there were distant lines of storms, with an occasional flash of lightening that we kept a close eye on, in case they decided to head our way. Soon the faint flicker of stars were visible against the deepening blue sky and we were soon in the midst of polar aligning. After I had completed the Atlas mounts mechanical alignment with the Earth's axis, I slewed the telescope over to Vega rising in the east, and brought the cameras to focus and aligned to one another. By now, clouds had begun forming off the Great Lakes and were flowing over the region, making calibrating the mounts GOTO a slow slog. Eventually, I was able to complete that step and was then ready for EAA observing. But, with the clear skies losing the battle with the clouds, I parked the telescope mount, powered down the cameras, and covered up the telescope. Got out the binoculars and joined Denny for a little arm-chair naked-eye/binocs observing. We both finally called it quits at 11pm and headed indoors to bed. Not a very productive night, but at least we were ready for the next clear evening.

**Saturday 05/28/2022:**

Was woken-up at 2am and 6m by the sound of rain hitting the camper roof. Finally, a particularly heavy downpour at 8am roused me from bed. After about an hour, the rain moved off and folks on the field began to stir. It was a little too damp and cool to sit outdoors, so I spent the morning inside the camper reading and preparing my observing notes. My plan for tonight was to hunt galaxies listed in the April/May/June issues of Sky&Telescope that I've been hanging on too. There were a number of large, bright spirals and interesting interacting galaxies to spend an evening observing.

A little after 10am, another round of showers moved over the field, once again soaking everything. Hopefully, that will be the last so the field can dry out. Between the reading and the rain 'white noise', I decided to take an early noon nap. Woke in time to see Kiski/ORAS member Ed K pulling in with his travel-trailer observatory and setting up at the northern end of our section.



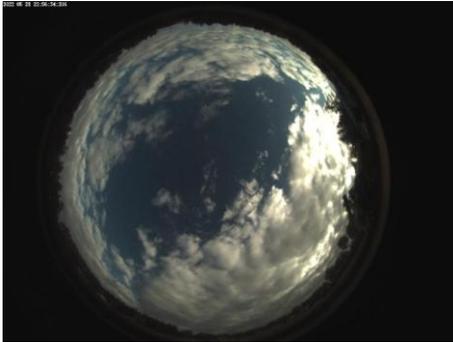
During the day, there was a constant inflow of new folks, bringing the count to well over 50 people on the field. Around 2pm, ORAS member Dean S arrived and pulled in across from me, next to Tracy. Our section of the field was starting to fill up!



After a few more short showers that hindered Ed and Dean during their setup, the rain finally came to an end and the sky gradually cleared. The Sun came out and began drying off the grass, and the temp warmed up nicely. The new arrivals were busy working on getting their telescopes assembled.

Late afternoon, with the weather forecast improving, I uncovered the telescope and prepared the laptop. I also brought out my new clamshell blackout tent and set it up. I then went for a walkabout around the observing field and visited with several folks. At dusk, I decided to redo my mounts GOTO calibration as I wasn't happy with the cloud dodging from the night before. Tonight, the sky was a crystal clear dark blue! It was looking to be a very good night, perhaps an 'all-nighter' kind of night!! ☺

I started off warming-up on globular cluster M3 in Canes Venatici, one of my favorite spring-time clusters.



(8" SCT @ f6.3 on a Atlas Gem, ZWO ASI294MC camera with L-Pro filter, 15 second subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 5 minutes).

I then spent the next several hours working galaxies from the Sky& Tel issues. These included NGC3521 in Leo, NGC4725 in Coma Berenices, and NGC4527 & 4531 "the Whale Galaxy" in Canes Venatici.



(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC camera with L-Pro filter, 3 minute subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 30 minutes).

I then slewed the telescope to the "Sombrero Galaxy", M104 in Corvus, with its prominent dark-lane. While the livestack was building, I went for a walk to visit with Dean, Tracy, Denny & Ed. Tracy was imaging the Whirlpool - M51, while Ed was working M99. Dean was shooting the Rho Ophiuchui cloud complex. And Denny was imaging Sharpless nebula.



(same scope/camera info as above)

The dew was heavy from the get-go! Eventually, the AllSky cam lost the battle with the dew, and I even had to borrow a 12v hair dryer from Denny to clear the SCT's corrector plate as I didn't have the dew controller set high enough. (I then cranked it to high). But the effort was for naught, as around 3am fog began to build on the field and within minutes, the sky had gone soft from all the moisture in the air. I decided to call it a night, powered-down the equipment and headed to bed at 4am.

### Sunday 05/29/2022:

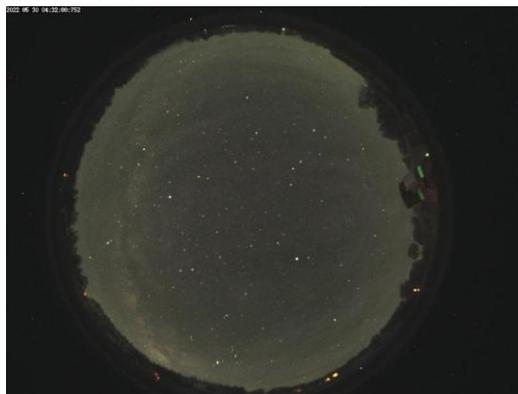
Slept in for about 6 hours, up at 10am. Gonna need a nap later,,, LOL. Spent the day socializing with our group, trying to stay out of the sun. While I had the telescope uncovered, drying out from the previous night's heavy dew, Dean helped me give the optics a much needed cleaning. Later Tracy pulled-out the AllSky cam that he was building for the park, and we all kicked in our 2cents. The camera & dome looked great! Can't wait to see it live online.

I got out my old StellaCam-3 analog camera, plugged it in and tried several different wide-field lens with it. Wanted to have another option for tomorrow night's anticipated Tau Hercules meteor storm, if it happens. After that I headed indoors and got in a several hour nap!

All day, the sunny weather brought more campers into the park. The observing field was beginning to look busy! Another 'regular' of our field section, Steve, showed up and setup his tent and refractor at the southern end of Orion Ave in his usual spot.



After the nap, I assembled the clam hatch blackout tent and put together a few notes for the evening observing. (more spring galaxies and a little comet hunting!) At sunset, the few daytime clouds that were hanging around evaporated, and we settled in to wait for nightfall and the stars. I powered-on the telescope and laptop, and set the dew controller to medium. Once dark enough, I slewed the telescope over to Regulus in Leo to focus the cameras with the Bhatinov mask. The evening air was getting 'crisp', but underneath the clam hatch tent, it was almost shirt-sleeve temps. Started off my EAA observing with the bright spindle galaxy NGC4565 in Coma Berenices, nicknamed the "Needle". The edge-on galaxy filled the laptop screen, with good detail visible within the dark lane bisecting the galaxy. A very nice view!



(8" SCT @ f6.3 on a Atlas Gem, ZWO ASI294MC camera with L-Pro filter, 3 minute subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 30 minutes).

I then started thru the June Sky&Tel magazine with its fine list of interacting galaxies, some of which are Arp Peculiar galaxies that are on my project list. With the exception of NGC4656/4657, the "Hockey Stick & Puck", in Canes Venatici, all of the rest were quite small objects, requiring me to zoom the display window during the observation. But they were all still pretty cool and unique objects to view. In addition to the "Hockey Stick", here's NGC5257/5258 in Virgo:



(8" SCT @ f6.3 with the L-Pro filter, 3 minute subs, for 30 minutes).

Early on, in-between chasing Arps, I also tested-out my old StellaCam-3 analog vidcam with a widefield lens. It was fun giving the B&W camera a second life.



During the evening, the group took turns dropping in on each other to see what they were observing/imaging. It helped to stay awake to occasionally stand up and stretch the legs. Also, the naked-eye view of the Summer Milky-Way overhead is always worthwhile. Throughout our group being together, we've kept a txt chat going to share comments and screenshots of what we were observing. (tonight Ed was imaging M101, and Denny, Tracy, and Dean were all three on the Lagoon & Triffid Nebulas - M8 & M20). So around midnight on t he chat, I declared a 'KitKat & Doubleshot espresso' break! Eat em if you got em! (if if you needed one, I had a large bag of them).



At 4am, with the end of astronomical twilight approaching, I finished the night by EAA observing Comet Panstarrs K2 in Ophiuchus. The comet displayed a bright round coma with a star-like nucleus, along with the hint of a stubby tail.



(8" SCT @ f6.3 with the L-Pro filter, 3 minute subs, for 15 minutes).

I then closed-down the telescope and put away the hatch tent, and finished the night with a naked-eye observation of Jupiter & Mars rising above the trees along the eastern horizon in the light of dawn. In bed at 4:45am.



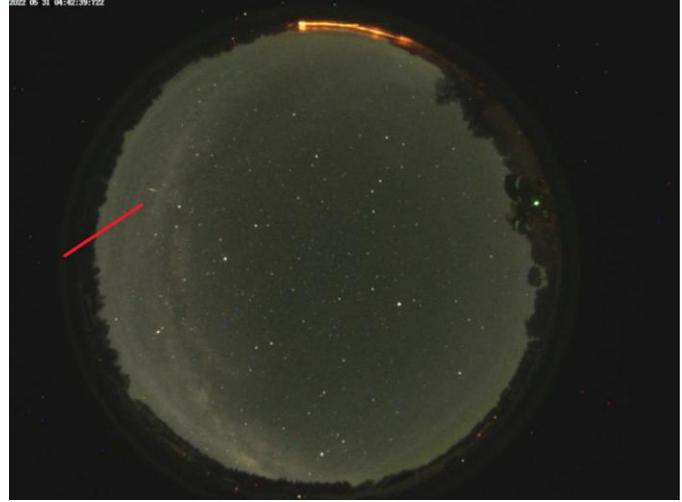
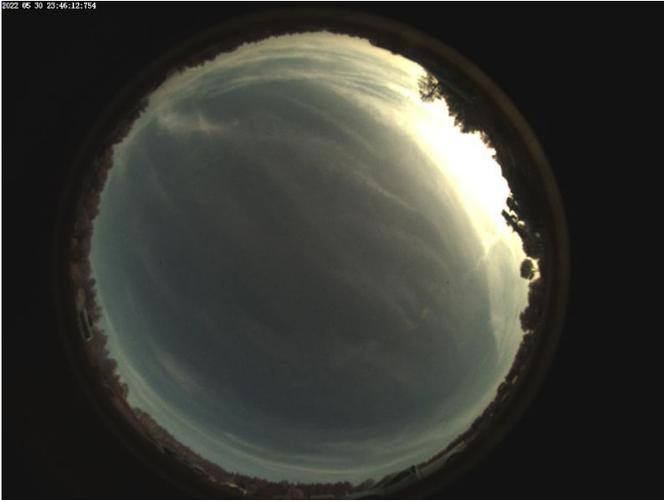
### Monday 05/30/2022:

Slept in till the warming camper woke me. After breakfast and visiting with the group, Dean assisted me in setting up the fully extended clam hatch tent. It's a bit of effort for one person to assemble, so I decided to have it shortened to hang down directly from the hatch. Drove down to Lyman Run at noon for a shower, then had lunch back at camp. About a third of the folks who were there for the long holiday weekend packed-up and left, leaving about 75 - 100 amateurs staying on the field. Later in the day, our buddy Gordon from Ontario arrived and setup over by Tracy.



The bright Sun soon dried-out all the remaining wet patches around the field and the temps soared into the mid-80's. It became a hot day! I had wanted to take a nap inside the camper, but the inside of the camper was just too hot, so I sat outside under my canopy in my rocker chair and tried to snooze. Really needed more than the five hours of sleep if I was going to pull another all-nighter and stay up for the predicted Tau Hercules meteor shower. But soon, folks were stopping over to visit, so no 'nap' for me! LOL. At 6pm, Denny pulled-out his grill and cooked kielbasa for the group. Everyone pitched in what they had to help make the meal.

At sunset, everyone uncovered their telescopes and began setting-up additional cameras on tripods for the meteor shower. I planned on using my AllSky cam, along with my other old analog cameras. The warm temps continued into the evening and everyone dressed lightly. To our dismay, bands of light clouds and haze began to drift in from the Great Lakes, and the sky went partly overcast.



We gathered over by Tracy's & Dean's camp and watched for bright meteors thru the sucker-holes as dusk slowly settled-in. We were able to see a number of faint shooting stars, most of which we could trace back towards the radiant point to the west of Arcturus. But it wasn't no 'great shower' as a number of websites had hyped. The next day, I went thru all the subframes from the AllSky camera, and there was really only one positive image of a meteor. Oh well, at least we tried.

Around 11:30pm, the sky mostly cleared so we all headed back to our telescopes to begin observing/imaging. Tracy spent the evening imaging the Swan and Eagle nebulas, M17 & M16, Ed was on M51, Dean was working the Veil, and Denny doing Sharpless. I spent the evening up in Ursa Major hunting small Arp Peculiar Galaxies. NGC4088 (Arp18), NGC3631 (Arp27), NGC3718 (Arp214 & 322),



and what would be the highlight of the evening - M101 (Arp26).



(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC camera with L-Pro filter, 3 minute subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 30 minutes).

Occasionally, I would take a break to stretch my legs and walk around to visit with Gordon and the others. Finally, around 3:30am, the lack of sleep was really catching-up to me, so I called it quits at 4am. So, while the first half of the evening was a bust, the clearing sky made-up for it later. Overall, a decent night of observing.

**Tuesday 05/31/2022:**

Slept in till around 10am, when once again the warm camper woke me. Tuesday was a repeat of Monday, with the group playing "stay out of the Sun" trying to stay cool. I disassembled the extended clam hatch tent and went back to the shorter setup. After lunch I went for a walk around the observing stopped-in to visit my neighbor Jan from Philly and her new camping van, then walked over to visit the folks from York, Paul, Brad, and Mark.



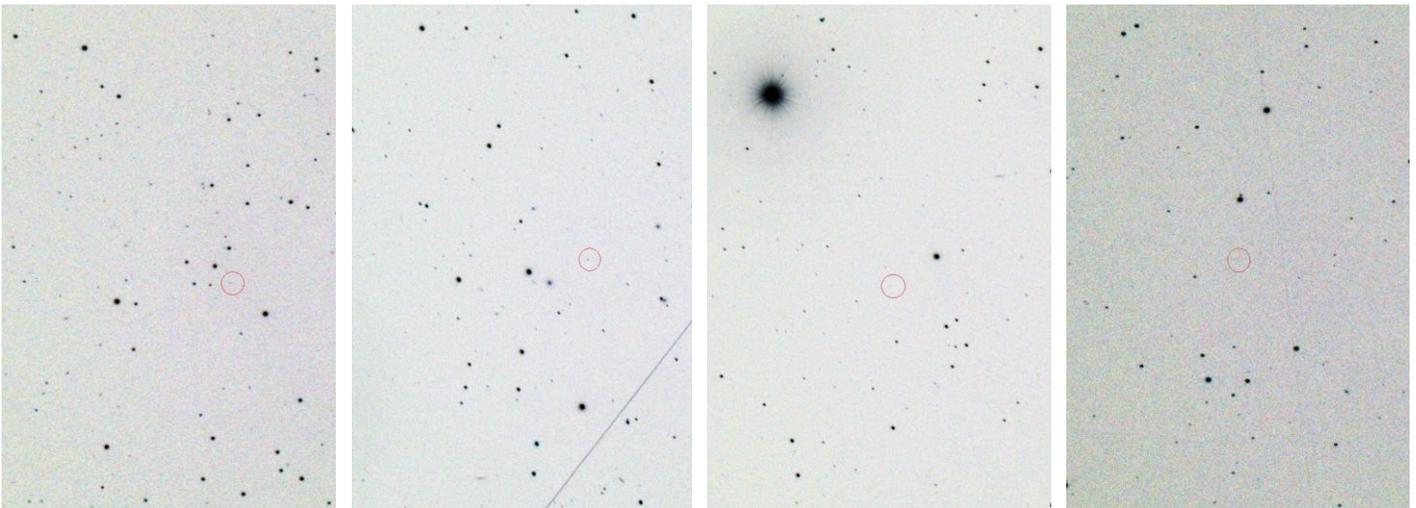
Late afternoon, Eric L (Leigh Valley) arrived and headed back to his usual spot on the western edge of the observing field.

For dinner, Denny brought his grill out again and we all kicked-in something for another group meal. At sunset, we began uncovering our scopes and preparing for the night. The sky had gone partly cloudy, but the satellite images and forecast showed clearing and looked promising for most of the coming night. Needed to make the most of it as Wednesday and Thursday were going to be rain days). My plan for the night was to continue Arp galaxy hunting using the L-Pro broadband filter. But I first wanted to do a little Quasar hunting in Leo before that constellation got too low on the western horizon. After 'warming-up' on the globular cluster M5 in Serpens,,,



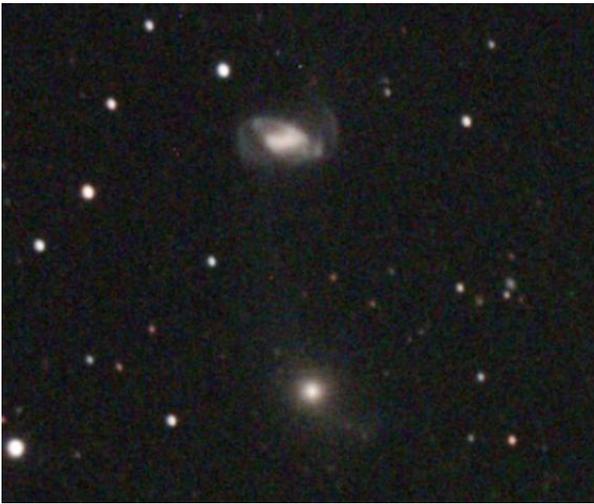
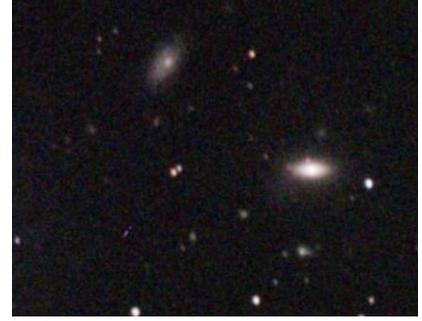
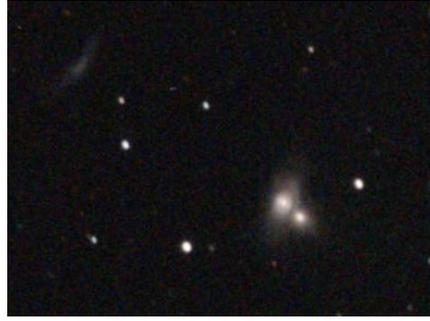
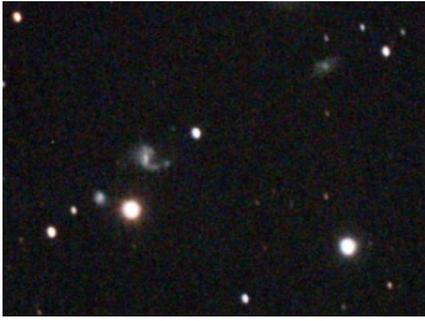
(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC camera with L-Pro filter, 15 second subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 5 minutes). I slewed the telescope over to Regulus and pulled out the Sky&Tel April issue and used the photo 'finder charts' from the article to try EAA observing these elusive exotic objects. Pushing my optics and camera, I was able to identify all four of these 18<sup>th</sup> mag+ objects. It was pretty cool observing 8 to 9 billion year old objects out towards the edge of the universe!

Here they are: J104139 (Leo-1), J104520 (Leo-5), J104604 (Leo-6), and J104624 (Leo-8).



(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC camera with L-Pro filter, 3 minute subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 15 minutes).

By now the sky had gone un-expectedly overcast in the south and east, leaving only overhead and towards the northwest mostly clear. (so much for accurate forecasts!) I then hurriedly switched over to Arp galaxies, starting off in Bootes with UGC9178 (Arp45), NGC5929/30 (Arp90), NGC5820/21 (Arp136), and then working my way over to Ursa Major for NGC5216/18 (Arp104), and NGC5278/79 (Arp239).



(8" SCT @ f6.3 with the L-Pro filter, 3 minute subs, for 30 minutes).

It was now a race to get in observations thru the larger clearings, so I was forced to shorten my length of exposures and watch for clouds on the AllSky cam creeping toward my telescope's field of view. Still, I was able a number of good observations in and held-out till 4am before calling it quits. Another decent night of observing.

### Wednesday 06/01/2022:

Another short sleep period, up at 9am from the camper getting hot. After breakfast, I put away a few outdoor camping items in anticipation of the storms heading our way later that afternoon. With the wet forecast over the next two days, Ed decided to pack-up his observatory/camper and headed back home. Dean, Tracy, Denny and I spent the morning sitting under our canopies/awnings, visiting and staying in the shade. The sunny morning skies began to give way to thickening clouds and one particularly dark looking one spritzed us as it passed overhead.

Denny needed to run down to the hardware store in Sweden Valley, so Dean and Tracy went with him, while I stayed behind to watch the camp. After lunch, I sat outside and read, the camper being too warm. During the day, more folks began arriving at the park, including Chip and Eric from ASH. Around 4pm, dark clouds began to build to our west and soon we could hear thunder off in the distance. We quickly put away our chairs and gathered over at Tracy's to watch the incoming storm. Fortunatley, the storm split and the more severe weather went to our north and south, missing the park. But a light shower sent us all indoors to our campers which had finally cooled off.

At 6pm, two large RV style vans pulled in and parked right next to me obscuring my SW horizon. But no worries, as I had finished this trip's observing plans for that direction. After they had finished setting up, I went over and introduced myself to John and Rich, both from Connecticut.

Just after 8pm, another more ominous line of storms approached the park from the west.



We sat over by Tracy's camp and watched the lightening show until it got close, then with raindrops beginning to fall, everyone headed indoors to their campers to ride-out the storm. Before long, a strong downburst of wind and rain hit the field, really whipping my camper's 'visor' sunshade around, adding several new tears to it. After about 15 minutes of storm thrashing, the wind quieted down and the storm went to a gentle rain that lasted into the evening.

I spent that time reading and watching the TV. The sound of the rain tapping on the camper roof was putting me to sleep, so I called it an early night and in bed at 11pm.

**Thursday 06/02/2022:**

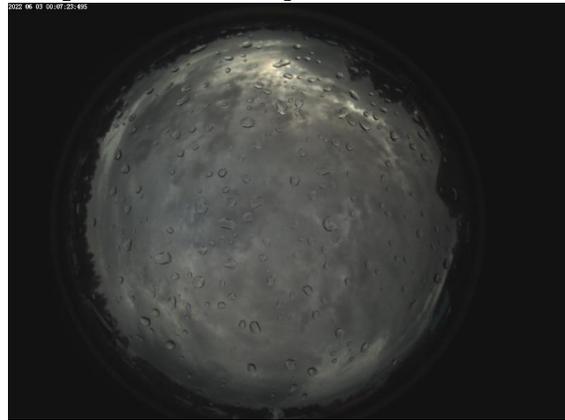
Finally had a long good night's sleep!! Slept in till around 8:30am, waking to a grey damp morning. But soon, the Sun broke thru the clouds and began to dry out the observing field. Sat around camp and visited with our group. Watched a large number of new arrivals for the star party. These included Ray M and Bob K from our Kiski club, (Ray setup next to Denny), new folks Carol & her son Joe who setup diagonally across from me, and Trevor J, the Astrobackyard guy in his new Tab camper. (there were five Tab campers on the field this year!) The park was really filling up! Tents, campers, and telescopes everywhere!



During the late morning, I gave Tracy a hand in installing a CS Darkskyfund AllSky camera on top of the restroom. That will be a nice feature to go with the SQM meter that Tracy had installed last year.



At 1pm, several of us walked over to the front gate and registered for the star party. Afterwards Denny helped me repair my camper 'visor' awning which had several of its fiberglass rods snapped in last evenings storm. The visor is on its last legs, and this will be its last trip. I then walked over to the food vendor who had opened for business and had an early cheeseburger dinner. With the late afternoon sky going partly to mostly overcast, Denny and I went for a stroll around the observing field, dropping in to visit with Bob K, and Eric L, and also stopped in to say hello to Chip.



We started to feel raindrops, so we cut our walk short and headed back to camp. Several brief rain showers went over the field, but the forecast was calling for clearing late in the evening, perhaps after midnight. Once the showers let-up, we all stood around and compared forecasts. Being overly optimistic, I went ahead and assembled the clam hatch tent and powered on my laptop and monitors, but left the telescope covered. I then went indoors to read. Around 10pm, a heavy shower lumbered over, thoroughly soaking the field. I ducked outside and stayed underneath the open clamshell hatch, watching for leaks around the tent, which worked pretty well except for one corner.



Once the rain had let up, I headed back inside to wait for the clearing. Around 11:45pm, another rain shower went over. At that point, most of the group pulled the plug on staying up, but I stuck it out for another hour. Finally, toward 1am, I called it quits, powered down the computer and broke-down and packed-away the clam hatch tent and headed to bed. Woke up once at 3:30am, looked out the window to see stars. But headed back to bed! LOL!

**Friday 06/03/2022:**

Up at 8am to sunny skies and a light breeze. Apparently the sky had cleared, right before dawn. The observing field soon dried out, except for a few deeper puddles. After a quick breakfast and a trip to Lyman, once back at camp I headed over to the vendors tent and visited with Bob K. Picked-up a few used astro-related books at the table next door.

At 1pm, Denny and I headed over to the large pavilion where we joined Dean for the 1<sup>st</sup> talk of the day. It was on the new computerized evscope with hands-on experience by the presenter. It was an interesting talk, perhaps the future direction of astronomy.



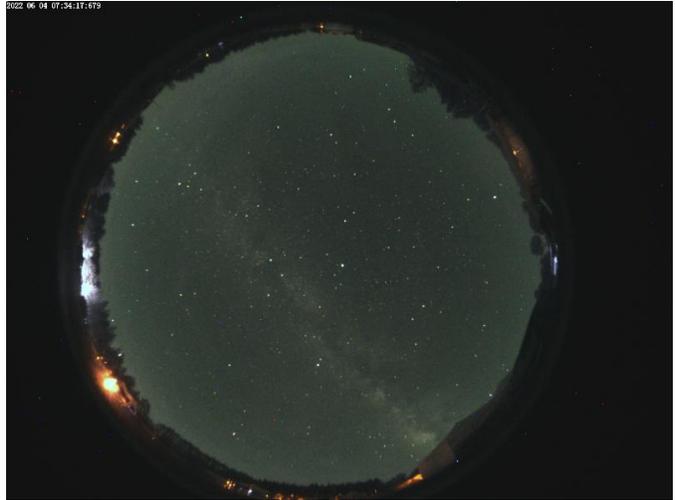
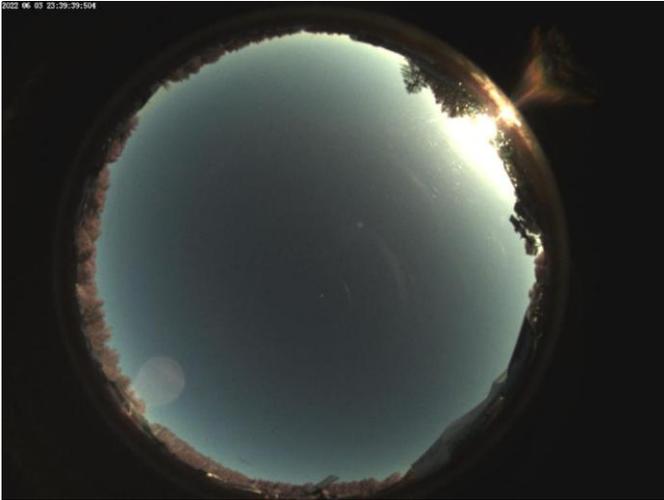
We then headed back to camp. Tracy had his PST solar scope out and we got good views of several sunspot groups and Ha prominences. At 3:15pm, I gave my presentation on Halton Arp and his Peculiar Galaxies to a good size crowd. Lots of good questions afterwards. Hopefully, I inspired others to also observe these interesting galaxies. Afterwards, our group, (Denny, Tracy, Dean, Gordon, Ray, and I), had a pizza dinner that Denny and Tracy drove down to Coudersport to pickup. We were all comfortably stuffed. At 7:30pm, I made a quick phone-home, setup my clam hatch tent and uncovered my telescope, and then went for a walk around the observing field till dusk, visiting with folks and taking pictures of their setups. Lots of good visual and imaging telescopes of all types being uncovered there on the field.







Once back at camp, I changed into heavier observing clothes as the air temps was quickly dropping and the ground was beginning to already get dewy. I powered on the telescope and laptop, cranked the dew heaters on waited for full darkness to settle in.



My observing plans for tonight was to wrap up a few more Arp galaxies with the L-Pro filter, then switch to the L-eNhanse narrowband filter and work on my Abell Planetary Nebula project. From a suggestion made by Gordon, I started off in Corvus with the Antenna Galaxy, NGC4038/39 also known as Arp244. Also added in NGC4027 - Arp22.



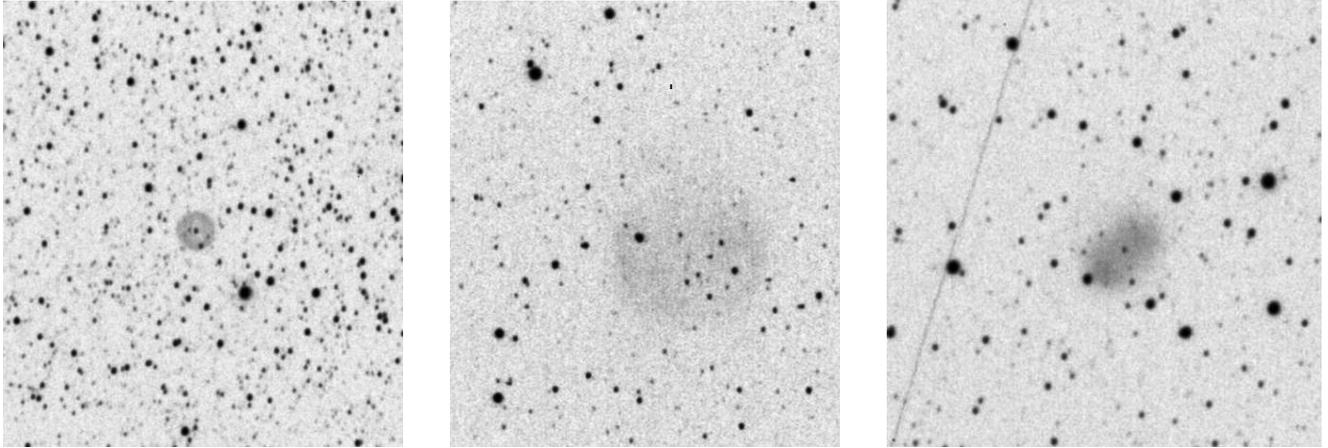
(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC camera with L-Pro filter, 3 minute subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 30 minutes).

I then moved higher up in the sky over to the Northwest to Canes Venatici, near the handle of the Big Dipper to EAA Observe one of my favorite interacting galaxies - M51.



(same telescope & camera info)

I decided that was a good 'closer' for galaxy season, so I spun the filter wheel to the L-eNhanche and slewed the telescope over to the southern horizon to the Milky-Way in Scorpius and Sagittarius to go planetary hunting. There I spent the remainder of the evening imaging multiple Abell's with the best three being Abell151, Abell165, and Abell166.



(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC camera with L-Pro filter, 3 minute subs, dark & flat calibration frames, PHD guided, livestacked using SharpCap for 15 minutes).

Throughout the evening, Tracy was imaging first M81 & M82, then he moved on to the Crescent Nebula, Dean was shooting widefield Milky-Way starclouds over in Sagittarius and Scutum, but was having issues with the wifi connection on his ASIAir box due to so many other ASIAir users being nearby, and Denny was imaging nebula and learning the ropes of using SharpCap's "Livestack" feature, with an assist from me.

By 5am, with dawn lighting up the eastern sky and Jupiter and Mars glowing brightly above the tree-tops, I powered off the telescope, left the hatch tent setup, and crawled into bed! It had been an awesome night at Cherry Springs, the best of the entire trip.

### **Saturday 06/04/2022:**

Woke early to the noise from other campers. Got in only about 4.5 hours of sleep. It was going to be a high-caffeine kind of day,,,

After a late breakfast, I carried an assortment of no longer used astro-accessories over to the swap meet area by the vendor tent. (had to bring my own table). No complaints as I actually did quite well in selling off the surplus items. Ray did well, selling off an old mount, and Denny picked-up a used 6" RC optical tube. (as I used to own one, later that afternoon, I helped Denny with attaching it to his mount and getting his camera focused). Dropped in at the vendors tent to say hello to Bob K.



The sky remained sunny all day with a steady breeze, occasionally strongly gusting. I walked over to the food vendor at noon for another cheeseburger lunch and afterwards lounged around at camp. The forecast for the evening was not looking good, so a fair number of folks pulled-up stakes and headed home, including Gordon and Tracy from our group. Denny, Dean, and I then headed over to the pavilion to listen to ORAS club president Tim S give a talk about our new observatory.

There were a number of attendees interested in camping out on the ORAS observatory field, so hopefully, we'll get a few new members out of Tim's presentation.

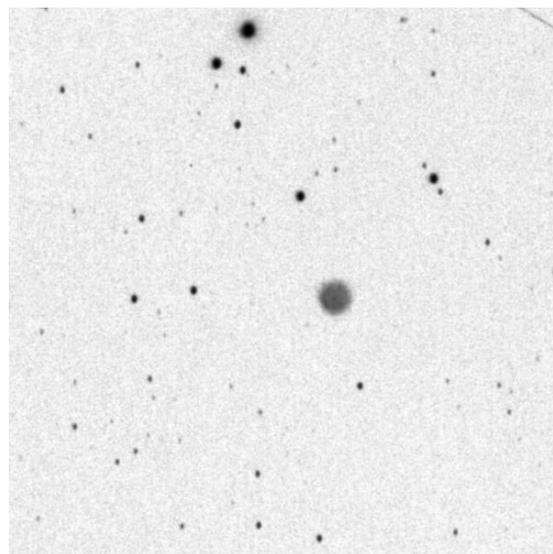
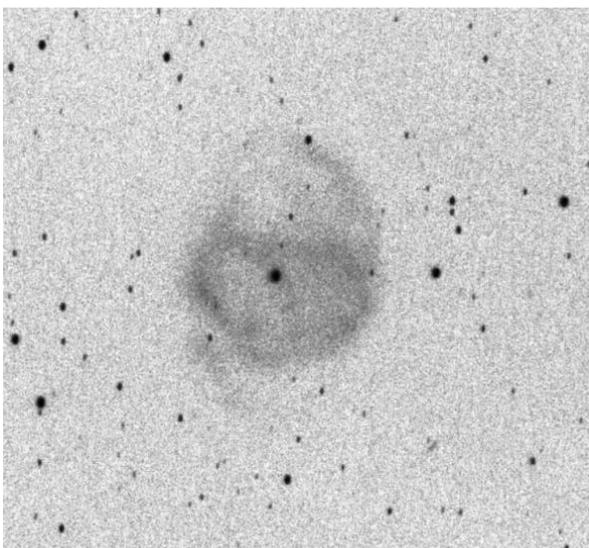


After a quick break, we listened to the Park Ranger update and then it was time for the big raffle drawing. From our group, only Denny got lucky, winning a gift certificate. Heading back, I stopped again at the food vendor for dinner, and then went for another walk around the observing field.

At dusk, the sky was still clear and the winds finally died down. I uncovered my telescope and prepared my notes for the evening. Was going to continue EAA observing Abell Planetaries. While waiting for the Waxing Crescent Moon to drop lower, I gave in to being a lunatic and took a gander at Luna:

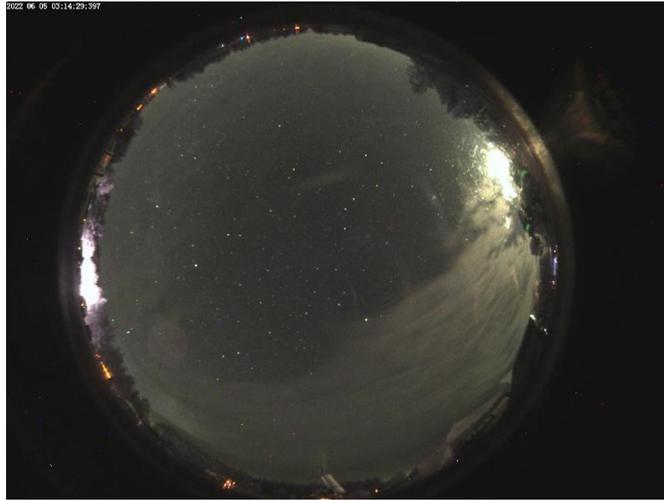


Once dark enough, with the Milky-Way softly glowing in the east, I started off in Virgo observing Abell-36 and Abell-37 (IC972).



(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC camera with L-Pro filter, 3 minute subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 30 minutes).

Before long, around 10:45pm, clouds began moving in from the NW. Within a half-hour, the entire sky went overcast, shutting down my planetary nebula observing.



After looking at the satellite cloud image and consulting several forecasts, Denny, Dean, and I called it quits and powered down our equipment and covered up. After a few minutes of standing around cursing the weather, we all headed indoors to bed.

**Sunday 06/05/2022:**

Slept in and woke to a mostly cloudy sky. According to others that I talked with later, it never really cleared overnight, except for a few brief sucker-holes. Glad I went to bed and didn't try to stay up. Spent the morning slowly packing up the telescope equipment, and then the camping gear. Had the camper hitched to the car and was ready to head out by noon. Dean had already pulled out in search of the RV dump station, and Denny was also about ready to hit the road. Said my goodbyes to my neighbors and started off for home. By 5pm I had backed the camper into the driveway and began unloading.

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So this wraps-up my Cherry Springs Star Party report for 2022. As I mentioned at the start of this report, It was good to be back at Cherry Springs State Park and getting to spend time with all my observing buddies. Looking forward to making back to the park in the fall.

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

P.S. here's the AllSky time-lapse video from Friday night, June 3<sup>rd</sup>:  
[https://youtu.be/jBKChRrr\\_IY](https://youtu.be/jBKChRrr_IY)