Cherry Springs Star Party - June, 2016

With the end of May and Memorial Day weekend fast approaching, it was time to pack for the 2016 Cherry Springs Star Party,,,,

Sunday 5/29/2016:

Left Pittsburgh around 10:00am for Cherry Springs. The morning was overcast and stayed that way throughout the drive. The closer I got to CS, the more I began to run into rain. While driving thru the deep valleys along Rt555, it was interesting to see how much the forests had filled-out in less than a month's time from my previous trip. The leaves still had that new growth 'verdant' look to them, even in the gloomy weather.

Arrived at the park about 2:30pm and began setting up camp in my usual 'spot' on Orion Ave, next to Denny who had got there a few hours ahead of me. Bob K was already there, having driven up on Saturday, along with Dennis and his wife from York. I hadn't much pulled in when I had to take cover under Denny's tent canopy from another downpour! Once that ended I finished getting my camper and tent s quared away, but decided to leave assembling the telescope for a drier Monday. Spent the rest of the day visiting with Bob, Denny, Conrad who stopped over, and Nick and Jane who pulled in late -day and setup next to Dennis. Not sure if the Blue Herons nesting in the pines along the southern edge of the observing field cared for the rain, as the chicks could be heard squawking. With more rain showers passing thru, we all headed indoors at dusk. Got in a little reading, then off to bed early.





Monday 5/30/2016:

Woke to a partly sky, which continued to improve throughout the day. After breakfast, I setup my telescope, a Celestron CGem mount with a 8" SCT optical tube, 80mm Kson Refractor, and 50mm Orion Guidescope, and attached the StellaCam videoc ameras.



While a few of the holiday weekend non-astronomers pulled out for home, a number of true amateurs arrived and setup, including Fred K & Frank W from Pgh. The day turned into a 'scorcher', so I tried to stay in the shade to keep cool.



At sunset, everyone uncovered their telescopes and finished preparations for the night's observing. I got my notes and books in order and focused the cameras. Once Polaris came out, Denny gave me a nice demo on using the new 'Pole Master' accessory used in obtaining an extremely accurate polar alignment. (I already had one on order). Afterwards I went back to finishing my own telescope's alignment and calibration, during which we had a nice bright ISS pass to the North East. I then began working on my constellation survey project high over the pole in Canes Venatici. Ended up spending almost the entire evening in that part of the sky video-capturing plenty of faint fuzzie galaxies. These included NGG4145, 4190, 4534, 5112, 5313, 5347, 5362, 5380, and 5406. After finishing off the last galaxy, I moved up overhead to Hercules and chased down planetary nebula HU2 -1. I then moved over to Scorpius for nebula IC4601, and then into Scutum for nebulas IC1287 and SH -61.

The evening stayed mostly dew free with good steady skies. During an occasional break, I would step away from the camper's clamshell observer work area, (which is shielded by blackout curtains that hang down from the hatch), and take in the Milky-Way rising in the East. We were all amazed at how bright Mars looked to the naked eye against the dark sky!



Unfortunately, our entire group was setup optically for wide-field deep-sky imaging and no one could get a decent high-magnification view of Mars. Still, after I had checked-off the last object on my observing list, I slewed the telescope due south did try video observing Mars with the 8"SCT & StellaCam-3, but the planet was just too small for a satisfactory view on the monitor. By 3:00am, Denny and I were the last ones still up from our group, so with Moonrise eminent, we decided to call it a night and shut down and cover up the telescopes and kicked back in our chairs for a few minutes to enjoy the view of the Milky-Way star clouds now arcing overhead. But soon, within about 15 minute s, we noticed a drop in transparency and sure enough there was the waning moon poking thru the trees to the east. So with that, we both called it a night.

Tuesday 5/31/2016:

Slept in till about 8:30am. Would have liked to gone longer, but the warm cam per woke me up. Looked like it was going to be another hot day. Uncovered the telescope to let it dry out and spent the morning visiting with the group comparing observations from the night before. During the day, the number of amateur astronomers arriving and setting up swelled to filling at least a third of the observing field. This included our Canadian friends Mike P and Phil, who both setup by Denny, along with Scott who went to his usual location by the old Sky-Shied roll-off observatory.







After spending most of the afternoon doing mostly nothing except shoot the breeze with a bunch of us hanging out in the shade under my tent canopy, I headed down to Lyman Run for a late shower and dinner upon returning.



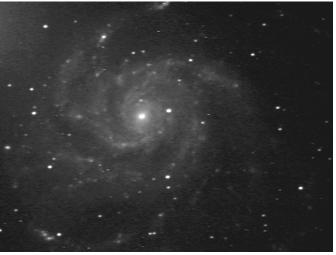


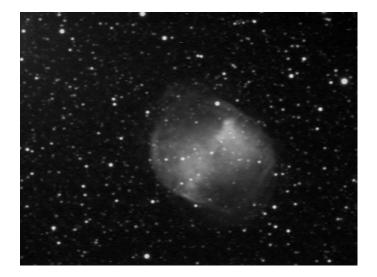
Afterwards, Bob K, Denny and I went for a stroll around the observing field dropping in on some folks and taking a few pictures along the way.

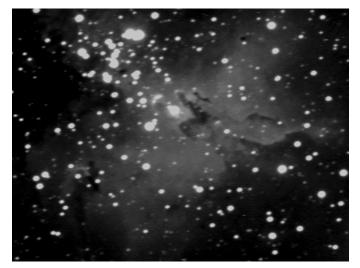


At sunset, we once again uncovered our telescopes and prepared for the evening. All afternoon, the sky had been hazy with scattered clouds, and while the clouds dissipated once the Sun went down, the haze stayed and became worse. I decided this was as good a night as any to learn how to use my new ZWO ASI 120MC camera as an autoguider and got it out and attached it to the 80mm Kson refractor. (had the StellaCam-II on the 50mm). With lots of help from Bob K and Denny, I was soon tracking and taking one to two minute video exposures thru the haze. My mount's polar alignment and telescope balance wasn't good enough to go much longer. Around midnight, the haze finally moved on and we had clear skies. I put my new autoguiding skills to use by taking two minute images of the Whirlpool Galaxy - M51, the Pinwheel Galaxy - M101, the Dumbbell Nebula - M27, and a three minute exposure of the Eagle Nebula - M16.









I then went back to survey work, pulling out my list of Webb Objects, video -capturing planetary nebula ME2-1 in Libra, and several small nebulas in Cygnus. Finally, by 3:00am, the lack of an afternoon nap caught up to me, so I reluctantly closed up the scope and went to be.

Wednesday 6/1/2016:

Slept in till 9:30am and woke to sunny skies. With the weather forecast heading downhill for tonight, several folks packed up and headed home, including Fred K and Frank W. But, more attendees of the fast approaching convention began to arrive and the empty spots on the observing field were soon filled. Denny and I spent the afternoon under my tent talking telescopes and astronomy. We both then headed in to our campers for a nap. The sky all day was partly cloudy with haze. By late afternoon, the haze began to thicken and the weather radar showed storms to the west of us. It wasn't looking good for the night. Bob, Denny, and I went for an early evening stroll around the observing field at sunset. Here's a few pictures:





Afterwards, we sat over at Mike P's camp and listened to the hockey payoffs, rooting for the Pens, as the brighter stars, along with Jupiter and Mars beg an shinning thru the haze. Phil and Mike uncovered their big dobs and gave us views of the planets. Then we began to notice that the sky was clearing. As the observing conditions continued to improve, both Denny and I decided to uncover our telescopes and try to do a little work.

I started up high in the Northern sky which was clear, working on a number of Webb Objects in Lynx. NGC2719, and IC2233. By 11:00pm, the entire sky was completely cleared off, with the Milky-Way nicely glowing in the east. I then moved over to the southwestern sky and video-captured several galaxies in Virgo, NGC4775, 5221 & 5222. Continuing chasing Webb Object galaxies, I moved back to the Great Bear and captured over a dozen faint galaxies in Ursa Major including NGC4100, 4144, and 4284 & 4290.

For several of the objects, I practiced more using PHD2 and my ZWO ASI autoguider camera techniques that I had started learning the previous evening. While I was having great success with guiding, it is a bit of an 'art' getting the settings just right, which I will need more practice with.

Around 1:30am the Blue Herons nesting to the southern pine trees became noisy and agitated. The ruckus became louder and within a few short minutes turned into a blood curdling shriek! We all felt that something really bad was happening to the birds, perhaps a predator was attacking the nest? After about another 5 minutes of the unsettling sounds, the noise died out. The next day, at least one of the Heron parents was spotted and the chicks could be heard. Afterwards, I've seen posts on Cloudy Nights from others who were there closer to that section of the observing field that a great horned owl had been the culprit and at least one of the heron parents had been killed. Whatever was the cause, it certainly left your blood cold and made one glad they weren't there observing by themselves that night!

By 3:30am, dark clouds began to scuttle in from the west, so we all closed up our telescopes for the night. It was a pleasant surprise for a night that looked to be bad!

Thursday 6/2/2016:

Sleeping in till 9:00am, I woke to a cloudy morning. A few folks packed up and left including Phil, but like yesterday, more convention attendees continued to arrive, including the various vendors. Bob and I went down to the vendor's tent to spend a few bucks and to say hello to Jeff from CCTS. Shortly afterwards, the clouds opened up and we had a strong downpour with the rumble of thunder. After about 20 minutes, the heavy stuff died down to a drizzle, which kept up off and on for the rest of the day. Mid-afternoon, our friend Tracy N from Delaware pulled in with his new truck and R -Pod camper and setup next to me.



The group of high school students from Lancaster that had joined our group at last year's CSSP, and who I had loaned my 10" Dob too, arrived and took Fred's spot beside Bob K. They came better 'equipped' this year, in addition to the small 4.25" reflector from last time, they now had a very nice Celestron 11" SCT on a alt-az GOTO mount. They were quite knowledgeable with its operation, having practiced at home beforehand with the scope. It was good to see a young group of amateur enthusiasts, giving one hope for the future of our hobby. As they were setting up the 11", Bob and Denny went over and gave them some good tips.





We all spent the rest of the afternoon and early evening dodging showers and visiting. Bob, Denny, and I headed over to Fox's for burgers, and afterwards stopped back at camp to collect Tracy and Mike for a walk across the main road to the public area to see the trees that we planted the month before. At dusk, we all headed in to our campers, where I read for awhile, then off to an early bed.

Friday 6/3/2016:

Slept in late to wake to a damp cloudy morning. Over night a few storms had went thru keeping the tall grass wet. Spent the late-morning and noon helping Bob K try out his new Daystar Quark Ha filter. While there wasn't much disk detail visible today, there was a nice limb prominence that we observed. After a quick visit to the Lyman Run showers and a bite for lunch, I gave my presentation on the life of Charles Messier - "The Ferret of Comets". The talk went well, with a good size crowd with lots of questions afterwards. Of course, my buddies manned the first row peanut gallery, which actually helped to keep me loose during the presentation. I then sat in on Bill Naeye's talk on LIGO, very good.



While the skies had started to partly clear at 11:00am, by late afternoon they were actually looking very promising for that night. After dinner at Fox's we all uncovered our telescopes, while Tracy setup two DSLR's for a wide-field time-lapse. I finished preparing the night's observing list, wanted to finish off a few more Webb Objects in Ursa Major and Cepheus. Also planned on chasing down about a dozen or so Herschel-II galaxies in Leo. And now that I was getting proficient at autoguiding, I wanted to revisit several Arp Peculiar Galaxies in Virgo and Ursa Major to re-videocapture with deeper exposures.

Around 8:00pm, Denny, Bob, Mike, and I went for a walk around the observing field to check-out all the interesting telescopes being uncovered. We also dropped in on Bill, Tony, Gary, and Conrad, and stopped in to visit with John and Kelly O from ORAS.













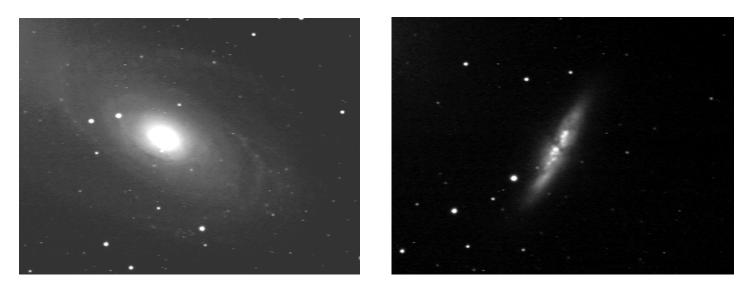








Shortly after sunset, as dusk was settling in and the dew point dropped, the Cherry Springs Jinx hit, with clouds forming right over our heads! They would form, linger for a few minutes then move to the east with new clouds developing in their place. This went on until near 11:00pm, with the sky finally settling down into generally clear conditions. I quickly started my observing program for the night in Ursa Major, having abandoned getting anything done over in Leo, as the Lion was now too far to the west setting behind my camper. I dropped in on old 'Messier' friends M81 & M82, shooting a series of deep 180 second exposures on both.



I then slewed over to Virgo in the South-West and thru a haze that was lingering in that part of the sky tried to image the jet in M87. Then I went back up overhead to Hercules who was still haze-free and tracked down several Arp Peculiar Galaxies - UGC10310 (Arp2), IC1222 (Arp73), and UGC10814 (Arp102). The haze has started building up shortly after midnight, and by 1:00am had taken the sky back to patchy overcast, causing all of us to chase sucker-holes. Then by 2:30am more substantial dark clouds began rolling in from the west and very shortly covered the entire sky, ending the night's observing. We all covered up the scopes and headed for bed.

Saturday 6/4/2016:

Woke to a hazy warm morning. The weather radar showed storms on the way for later in the day. A LOT of folks packed up and left. After visiting the swap table and vendors one last time with me, Bob k headed for home. Mike P packed up but decided to wait till after the 5:00pm raffle before heading back to Canada. After one last look at the hopeless weather forecast, Tracy decided to head out and soon he was all packed and on the road by mid-afternoon.

Denny and I planned on staying thru the night, but we both packed up our telescopes and camping equipment and even hooked up our campers to our tow vehicles. Denny, Mike, and I then took in the afternoon talks, including a Dark Sky Fund update from Max and a park update from Chip.





We then attended an interesting keynote presentation by Steve Conrad - lead engineer of the LORRI imager on the Pluto - New Horizons mission.

After that came the much anticipated raffle drawing, where both Mike and Denny took home prizes. (Denny won three times!)



After dinner at Fox's, Denny headed across the field to visit Gary H about modding his DSLR camera while I phoned home. Later at dusk, Denny and I sat under my camper awning, avoiding the occasional spit of rain and talked about various imaging software. With the rain beginning to pick up and driving the bugs under the awning, we both decided to call it a night. I quickly took down the awning and stashed it in the car and headed in. Spent a few hours watching a little TV and reading before finally heading to bed.

Sunday 6/5/2016:

After listening to several overnight rain showers, was up by 8:00am, finished the inside packing and on the road heading home to Pittsburgh in another hour. Denny was up sooner and pulled out earlier. The drive back was much like the drive up, damp and cloudy.

So that concludes the 2016 edition of the Cherry Springs Star Party. Overall, I count it as a successful trip, getting in some observing 4 nights out of 7!

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