

## Cherry Springs Star Party - June, 2015

With my work schedule this year conflicting with the New Moon's of April and May, I was looking forward to finally being able to get away and head up to Cherry Springs for the June 2015 Cherry Springs Star Party convention. Once again, several of us from the Kiski Astronomers had decided to go early to maximize our chances of getting in good observing nights. Especially as 2015 was shaping up to be a rerun of 2014, with never ending clouds and rain,,,,,

### Sunday 6/7/2015:

Finished packing a few last minute items in my camper and hit the road around 10:30am for the long drive up to Potter Cty and Cherry Springs State Park. I arrived at the park mid-afternoon to find Bob K already there, along with our friend Dennis (from York) and his wife still setting up camp.



Probably 25 - 30 amateurs were already camping on the field.

I pulled across from Bob, facing Orion Way and quickly unhooked the Tab teardrop and got my camp in order. It was rather breezy, which made setting up my easy-up tent canopy not so 'easy' to do. But with a little help from Bob K, I soon had it up and staked down. Attaching the sidewalls and staking them also proved troublesome, as they wanted to fly off like a kite. Eventually, I had the camp in order, and then proceeded on to assembling the C-Gem mount with the C8 SCT optical tube. By then, the clouds were rolling in, so I decided to leave the StellaCam video-cameras in the car. Later that afternoon, Conrad, the official 'Park Host' stopped over to say 'hello' to Bob and I.

By early evening, the sky was overcast and raindrops were in the air, so Bob and I both headed in to our campers. I spent the rest of the evening catching up on reading back issues of 'Sky and Telescope'. Overnight I was woken at least three times by heavy rain.

### Monday 6/8/2015:

The day started off partly cloudy and hazy, with the observing field quickly drying off. Bob K and I took a walk around the public area, across Rt44 from the main gate of the observing field. The western berm light barrier had been substantially raised in height, giving the outdoor planetarium protection from car headlights. Also several rows of new pine trees had been planted to the Southeast, helping block light coming from the rustic campground. And, the posts along the gravel walkway leading from the public area to the main astronomy observing field all had a white stripe painted on them, along with a solar-light to dimly illuminate the posts, helping to prevent folks from walking into them.



All this work by the park maintenance team should make the public area and planetarium much nicer and safer! Finally, thanks to a generous donation by Tracy N, a new entrance sign and multiple road signs have been installed in time for the spring season.





After a leisurely lunch and a bit of reading, Bob and I drove down to Keener's General Store for ice-cream! ☞ During the afternoon, the sky went to all overcast. With the wind picking up and the sky starting to look threatening, Mike M pulled in and began setting up his popup camper near Bob, just as a rain shower came thru.



It continued to rain off-n-on the remainder of the afternoon into the evening. After sitting around for a bit and discussing the less than promising weather forecast, we all headed inside and I finished off reading another magazine. Later, I pulled out a video to watch and stayed up till a little after midnight when an extended downpour made it hard to hear the TV. Decided to call it a night.

#### **Tuesday 6/9/2015:**

During the early morning hours, a number of heavy storms rolled thru, drumming on my camper's roof. After one large downpour around 7:00am, I was woken by a big crash from behind my camper. Once I finally roused out of bed, I went to investigate and found my easy-up canopy had collapsed from the weight of the water ponding on the tent canvas. The folding frame was bent-up, a total loss, and the tent canvas stretched out-of-shape on the side where the water pooled.



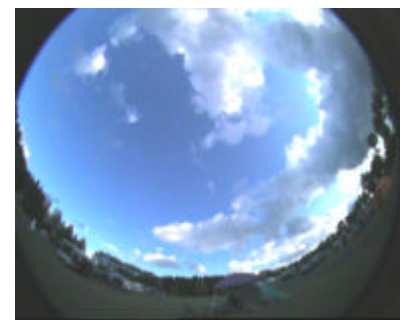
After salvaging the side-walls, I flagged down a passing park maintenance truck, and they happily carted off the remains of my tent. Bob and I then went in search of a new easy-up canopy. We found one at the Ace Hardware store in downtown Coudersport. (a great store). I also picked up a set of canvas tie-down clamps. Once back at the park, it wasn't long before my new tent was up, sidewalls re-attached, and the additional tie-downs keeping all the sides nice and taught.



It was good to have the new cover, as showers began to periodically pass over the field. But, with the weather forecast of improving weather, more folks continued to arrive during the afternoon, until about 75 attendees were there. This included our eastern PA friends Nick and Jane, along with Don P from the Hamilton Ontario club, who setup in our section of the field.



Late-afternoon, with the rain finally dying off and the Sun beginning to poke thru the clouds, I got out my cameras and attached the StellaCam-3 to the C8, and the SC-II to the little 50mm Orion finder. Then I setup my Samsung SDC435 video-camera with a fisheye lens and began capturing all-sky daylight images, one every 30 seconds. My goal was to let it run the rest of the afternoon and evening until Moonrise.



By sunset, the clouds had cleared completely off, and everyone began uncovering their telescopes in preparation of observing. I went for a quick stroll around the observing field to take a few pictures. I usually do this later in the starparty, but was worried that this might be the only opportunity to catch telescopes uncovered from the rain. (ended up being the only time I was able to walk around and take pictures, due to either the weather or being too busy).







Once we entered deep twilight, it wasn't long before the call went out - "There's Polaris!" Bob, Dennis, Mike, Nick & Jane, and I all powered up the telescopes and began our polar alignment routines. Don, having arrived late, was still in the process of setting up his equipment, but soon he joined in the fun.

While the sky remained clear, the transparency for the night was soft. It also became very dewy and it didn't take long to cover any unprotected surface. I spent most of the pre-midnight evening dealing with multiple visits from Mr Murphy. From mount alignment issues, to a faulty dew heater, to noise on the video-feed line, I worked my way thru a bunch of initial '1<sup>st</sup> night' technical issues. Finally around midnight, I was able to start serious work on my constellation survey project, hunting faint galaxies under Arcturus in Bootes. (NGC5411, 5424, 5456, 5492, 5587, and 5666)

After spending the next several hours video-capturing faint fuzzies, I noticed the 3rd Qtr waning Moon begin to announce itself, faintly illuminate the eastern horizon. I then switched over to open cluster survey work along the Scorpius to Cygnus stretch of the Milky-Way. (Bochum-14, Roslund-3, Basel-12, 14, and 15) Finally, a little after 3:00am, with the Moon cresting the trees and the Milky-Way beginning to slightly fade, I decided to call it a wrap for the night and powered off the video cameras and parked and covered the telescope. I then stopped the all-sky recording with the Samsung, and stowed it for the night. In bed by 3:30am. An indication of just how good the skies are at Cherry Springs is that even with the 3<sup>rd</sup> Quarter Moon rising in the sky, the Milky-Way still visibly glowed in the southwest!!!



The next day I processed the all-sky images and here's the YouTube link:  
<http://youtu.be/7JD2sodybi4>

### **Wednesday 6/10/2015:**

The day started out sunny!!! After a late breakfast, I uncovered the telescope to let it dry out from the heavy dew the night before, and re-adjusted the balance. Mid-afternoon, Bob N and Denny H arrived and setup next to us. Late in the afternoon Tracy N made it to the park and joined our group. Eric L pulled in and decided to go setup in a more southerly location on the field.



By then the observing field was starting to fill-in pretty good, with at least several hundred amateur astronomers there. During the afternoon, the sky went partly cloudy and the weather forecast wasn't too promising for that evening. But, by sunset, the sky was mostly cloud free, so I uncovered my telescope and prepared my observing notes for the evening. Unfortunately, scattered clouds soon began moving back into the area, and the weather radar showed storms coming in off of Lake Erie, heading in our direction. (the new internet service here at Cherry Springs is now awesome fast!!)

After re-doing my scope's alignment, and with lightening flashing off in the distance, I decided to work on open clusters until the storm got closer. Denny, Tracy, and Bob N worked on getting the initial alignment kinks out of their telescopes, with Bob N having a bit of laptop connection issues too. The rest of the gang left their scopes covered up. After video-capturing about a dozen Berkeley open clusters over in the Cygnus / Cepheus border, and with a thick cloud cover gradually rolling in from the N.W. I shut down the camera and telescope and covered up for the night. For awhile we all sat around in our lawn-chairs watching the light show to our north from the passing storm. Finally around midnight, the storm started getting closer, so we all headed in to bed.

#### **Thursday 6/11/2015:**

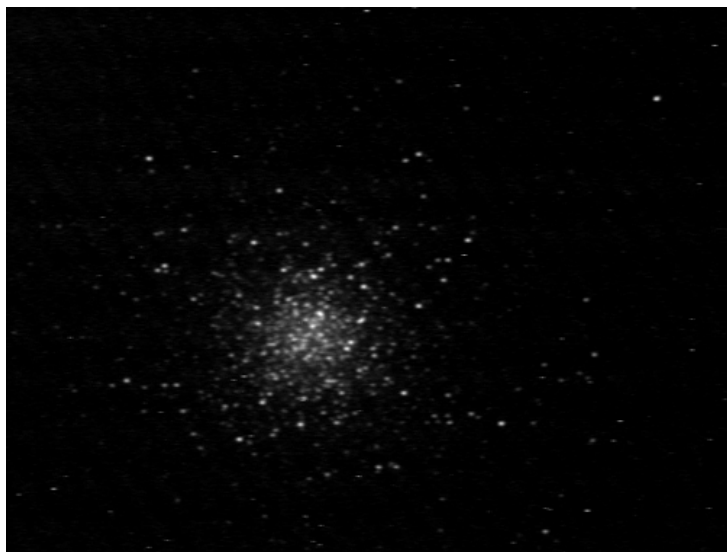
Woke up to a cloudy and cool morning. Overnight a few light showers had moved thru, but the bulk of the heavy stuff passed to our north. Soon the clouds lifted and the Sun came out to dry the observing field. I walked down to the vendor's tent and picked up a few items from Jeff of CCTS. This year, with 14 vendors scheduled, the host club had setup two large tents to hold them all. Lots of interesting hardware and even artwork!



With help from the gang, I decided to once again re-balance my telescope to eliminate a poor tracking issue I had the night before. Also, we had noticed that the peltier cooler fan on my StellaCam-3 video-camera was generating a vibration causing elongated stars on the display images over 15 seconds in exposure. We disassembled the cooler fan and isolated it from the heat-sink with a bit of double sided foam tape. Hopefully that works.

Throughout the day, more astronomers rolled in and the field soon became crowded. I would say by then over 400 were in attendance. The rest of Don P's Hamilton club members arrived, along with Mike from Niagara. They squeezed in down in the southern field section. John O from the Oil Region club pulled in a dusk and hurriedly threw his camp and telescope together.

As the afternoon progressed, the weather forecast started to go downhill, and by sunset, a hazy partly cloudy sky had settled over Cherry Springs. There was a group of high school students from Lancaster that had setup a few campsites down from our group, and between the 10 of them, all they had was a small 4.25" reflector. After we talked with them, and helped to get their telescope on its manual polar mount pointed at least in the right direction, I decided to loan them my 10" Coulter dob that I had brought along on the trip. As the hazy skies grew dark, Denny, Bob K, Don, and I helped show the students how to use the dob. They were able to observe thru the sucker holes Venus, Jupiter, Saturn, along with a few bright deep-sky objects with both telescopes. I then invited them over to my campsite where I showed them near-real-time views of M13, the Ring, and the Whirlpool with my video-cameras.





In the process, I tested out our 'fix' to the SC-3 fan, but the foam didn't seem to help and the only way to eliminate the blurring was to shut off the peltier cooler. I'll have to send it off for repairs next week.

As the remaining sucker holes began to close up, shutting down my video-observing, Bob K pulled out his laptop and then showed them some of the various deep images he's made with his telescopes. They really enjoyed that! Shortly after, Eric L and Phil D stopped over to see if we were still getting any video observing in, as he had already closed down his 24" dob for the night. We stuck it out till midnight to see if the clouds would lift, but the sky was pretty much done by then, so I called it a night.

#### **Friday 6/12/2015:**

The day started off still hazy, but much warmer. It was going to be a hot day! After breakfast, I reviewed my presentation notes for my talk later that day on T.W. Webb. At 1:00pm, Denny and I headed over to the pavilion for the 1<sup>st</sup> talk on preparing for the 2017 total solar eclipse. Good info, should really start thinking about making plans. The next presenter was Sandra M of the LVAAS, on their South Mt and Pulpit Rock observatories. I was particularly interested in her presentation, as I was scheduled to give a presentation at Pulpit Rock in August on Video-Astronomy. At 3:00pm, I gave my presentation on the life of the Rev Thomas W. Webb, the "Father of Amateur Astronomy", and his classic handbook, "Celestial Objects for Common Telescopes" Had about 75+ in attendance with good feedback afterwards.

After an early dinner, our group sat around Denny's campsite and watched the approaching storms on the weather radar. As the intensity of the storms built into the severe range, we began stowing away our camping gear and further securing the tent canopies. By 6:50pm, the storm hit the observing field with multiple lightning strikes and high winds.



After an intense 20 minutes, the storm passed thru and tapered down to a gentle shower. We all came back outside from our campers or cars to assess the damage. While our section of the observing field came out unscathed, though the power and wifi was out, we heard from others on the southern end of the field that around a dozen tents were blown down, along with several telescopes damaged. Mike from Niagara suffered several broken struts and electronics on his large dob, and Doug from the hosting club had finder rings destroyed. Eric told us how he had to hold on to his canopy from the inside to keep it from sailing off. We figured the large pine trees just to the north of our section of the field must have sheltered us from the full effect of the high winds.

Right before sunset, there was a clearing to the west, and we were rewarded with a spectacularly beautiful double-rainbow followed by a colorful sunset!!



Once the sun had set, the clouds rolled back in and a light drizzle developed. We sat for awhile under my tent canopy and visited.



After about an hour, the power came back on, so Denny, Tracy, and I went over to Foxes for ice cream while the "Bob's" decided to head for bed. Later, Eric and Phil stopped over and I played my time-lapse video from the other night for them. Headed inside to bed around 11:00pm.

#### **Saturday 6/13/2015:**

Woke to a dreary damp and cool morning. A quick check of the weather radar showed storms in the general area. The clearskyclock for that night was doubtful for any observing. Quite a few folks on the observing field packed up and headed home, including Bob N and Tracy from our group. Bob K and Denny broke down and packed away their telescopes, but decided to stay overnight. I left my scope up in hopes for a little observing and to participate in the public night.

After visiting the vendor's tent again, I decided to pack away a few items around camp, including the sidewalls. At 2:00pm, we all went over to hear the park ranger Chip H give the latest park update, along with Maxine H's update on the CS Deepsky Fund. Denny and I stayed for the next presentation by Phil D on touring the Southwest. We then ordered a pizza and had a group dinner back at Denny's camp.



At 5:15pm, we all carried our chairs over to the big door prize raffle where Bob K and Mike M from our group both won.



At 7:00pm, the public began arriving to partly cloudy skies. I uncovered my telescope and was able to get a video-image of M13 thru light clouds to show the early arrivals. Soon, amazingly, the entire sky cleared and we were finally treated to a clear evening! Then I spent the next several hours showing off the bright showcase objects to the general public, giving out handouts and talking 'astronomy'.

Finally around midnight the visitors left and I got back to serious work. I picked up my constellation survey in the "Bears", video-capturing a number of small faint galaxies. (NGC5323, 5412, 3683, 3690, 3738, and 3769).

Around 2:30am, those of us still out observing were interrupted by a thick ground fog that rolled over the field. Having been fogged out sooner, Eric L stopped in to visit with Don and I, who were about the only ones still up in our section. Don shortly packed it in and I stuck it out for another half-hour, but with the fog growing heavier and no breeze to blow it away, I powered down and called it a night at 3:30am.

#### **Sunday 6/14/2015:**

While I planned on sleeping in, I was rudely woken up at 7:00am by a hard downpour! Just what we needed on pack-up day,,,,, more rain! By the time I had dressed and stowed away the inside camper items, the rain had stopped, allowing me to start breaking down the telescope and camp. Bob K had pulled out for home shortly after the rain let up, and Denny followed about an hour later. Guess it pays to pack up everything the night before. After another hour, I finally finished packing the camper and hooked up the car. Took a quick walk around to say 'goodbye' to Mike, Dennis, Don, Nick and Eric and headed for home. On the way back, drove thru a few more rain storms, giving the car and camper a nice bath. Made it back to sunny and hot Pittsburgh by 4:00pm, where I spent the next hour unpacking all the wet items to dry out.

So that concludes the 2015 edition of the Cherry Springs Star Party. Once again, it was much damper than I would prefer, but I still managed to get some observing in over several nights. As they say, one half-decent night at Cherry Springs is worth a month of observing back home in light polluted skies!

Already looking forward to my next trip up to the "Astronomers Paradise!", the Black Forest Star Party in September. Let's all hope for drier weather!!!! ✍

Larry McHenry

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