Cherry Springs Star Party 2012

Due to my work schedule, my first chance for traveling to Cherry Springs finally arrived with the 2012 edition of the Cherry Springs Star Party. I spent the weekend of the 9th getting the camper packed and my astronomy equipment organized in my garage. Prior to the weekend, the extended weather forecast for the park looked great. But, over the weekend it deteriorated into rain early in the week and partly cloudy for the remainder. Still a partly cloudy night at Cherry Springs would exceed Pittsburgh skies on even our best of nights, so I continued with my travel plans. I hurried home from work Monday afternoon and loaded the telescope into the SUV and hooked up to my teardrop camper.

Tuesday 06/12/2012:

The day started off in Pittsburgh on the wet side. The forecast for CS called for much the same for the day and that night. But, for the rest of the week, the weather forecast looked good! I decided to hold off till late morning and make the drive up then. Figured I'd get the long drive and setting up camp out of the way, and get a good night's sleep listening to the rain tapping on the camper's roof.

The drive up was uneventful, I took the longer route thru St Mary's so that I could stop for an early dinner. Arrived at the park around 4:00pm and pulled-in at our usual spot off of Cygnus Ave, close to Kiski friend Dennis, (from York), who had been there since Sunday.

http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-01.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-02.jpg

I was able to get the easy-up tent assembled right before a thunderstorm hit the observing field. After waiting that out, I completed readying the camp, just in time for a second wave of thunderstorms that dumped torrential rains. Afterwards, the gravel access roads all looked like little streams. Once the rain had finally subsided, Don P from the Hamilton Ontario club arrived and pitched his tent across from us.

http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-04.jpg

By early evening, a few blue-sky sucker holes began forming overhead, so I pulled out the 6" Astro Tech RC telescope and readied it, just in case. It would have been nice to get a polar alignment, but that was not to be, as a heavy fog settled in over the observing field, making it difficult to even see Dennis's little Scamp trailer 60ft away. After watching a few DVD's out of the back of my teardrop camper, I closed up the hatchback and called it a night.

Wednesday 06/13/2012:

The day dawned sunny and breezy. Most of the swamp from the night before had drained away. The breeze was doing a good job of drying everything out. After breakfast, I went for a hike on the trail that was opened last fall. It's now complete and makes for a nice scenic walk. <u>http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-08.jpg</u> <u>http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-09.jpg</u> <u>http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-09.jpg</u>

The park has also added a new road back in the SW section of the observing field. It should provide better access and help organize that section of the field, which always turns into a chaotic mess of campsites during the convention. Around mid-day, John and Jim from the Hamilton club arrived and setup next to Don.

<u>http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-11.jpg</u> Late in the Day, Bob K from Kiski arrived and pulled in between Dennis and myself. <u>http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-03.jpg</u>

After dinner, I uncovered the telescope and attached the Stellacam videocameras. (the Stellacam-3 with .5 Antaries focal reducer on the 6" RC, and the Stellacam-II on the 80mm f3 refractor). <u>http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-06.jpg</u> If they ever give awards out for the most cables/wires hanging from a telescope, I think I would take the blue ribbon. <u>http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-07.jpg</u>

Sunset brought clear skies and falling temps. After achieving polar -alignment and working thru several equipment issues with the cameras, I began my constellation survey project in Libra, "The Scales". Between the steady breeze and an unresolved alignment issue, I was limited to about 20 seconds of unguided exposure. Still, that was plenty long enough to capture numerous faint galaxies and one interesting globular cluster - NGC5897. A benefit of the breeze was that there were no flying bloodsucking insects to 'bug' you. Didn't need to lather up on the repellant. Bob setup an interesting combination of equipment. His little Orion 80mm & SBig camera with a homebrew 50mm guidescope on his hefty Celestron mount. http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-03b.jpg Bob was getting some amazing widefield images with that setup, including shots of both the North American and Pelican nebulas in the same field!!

After running thru all the deep-sky offerings of Libra, I turned northwards to the Little Bear - Ursa Minor. By then, it was approaching midnight, and the Milky-Way was rising beautifully toward the zenith. Finishing up the Little Dipper, I spent the rest of the evening next-door in Draco, "The Dragon", hunting down the various galaxies that were riding on the dragon's back. I think the most spectacular galaxy was NGC5907. It filled the video monitor with its long spindle shape. Finally, at 4:00am, with the glow of dawn in the NE and the Last Qtr Moon hanging a bove the eastern tree-line, I shut-down the cameras and covered the telescope and went to bed. It was a great, glorious night of video astronomy!!

Thursday 06/14/2012:

Woke up late morning from the inside of the camper getting too warm. Just a few hours earlier, the temps were in the mid-forties, but have now rebounded into the more comfortable 60's. After breakfast, I uncovered the telescope to let dew from the night before dry out, and plugged in the dew heater battery pack into the charger. Went for a stroll among the vendors who had setup their wares in the big tent. Didn't see anything that I 'needed', so came back empty handed. Throughout the day, campers pulled in one after the other, and the observing field began to get crowded in spots. http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-16.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-17.jpg

Late in the afternoon, Bob N pulled in and was able to squeeze in between Bob K and Dennis. It was a good thing he got there when he did, as people were beginning to eye up that empty spot. After Bob N got his Aliner squared away, he assembled his Celestron 12" HD SCT.

http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-05.jpg

Most of our other convention/observing friends were also on the field. Tom H and Eric L and his father John from Central PA, Mike from across the border of Niagara, Along with John O from Oil city and a few others that I didn't get a picture of.

http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-12.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-13.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-14.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-15.jpg

During the late afternoon, a light haze with scattered clouds had built up, causing a few worries for that night's observing. But, by sundown , most of the sky had cleared and we settled in for another good night of observing. Once it was dark enough, I went for the far southern constellations of Lupus and Centaurus, both of which were skimming just above the tree tops. I was only able to work the very northern sections of each constellation . Lupus only offered a few objects, including two nice globular clusters -NGC5824 and 5986. But surprisingly, I was able to observe over a dozen small galaxies in Centaurus. After video-capturing what I could, and completing all of my planned observing for the entire week, I decided to spend the rest of the evening enjoying video observing the brighter Messier objects. As I was already over in the southern skies, I dropped in on the Lagoon Nebula - M8, along with its nearby neighbor the Triffid - M20. Then I finished up that area with the Swan - M17. I then headed northward and visited the Whirlpool Galaxy - M51, along with M101, M81 & 82, and finally the Owl Nebula - M97. At that point, I decided to redo my polar alignment and was able to increase my unguided tracking to about 35 seconds, and refined the GOTO accuracy to always put the object on the primary's video chip. It was now past 2:30am, and I was beginning to feel a bit tired from being up all the previous evening, so I closed up shop for the night.

Friday 06/15/2012:

Slept in late again !! Gonna need an afternoon nap! After breakfast and comparing observing notes from the night before with my neighbors, I again visited the vendor's tent, and grabbed a few visual views thru the Ha Lunts that were setup. There was a large prom visible on the NE limb that was only attached by a few points to the disk. Later in the day, I caught another view of it thru John's PST. Wished I had brought along my solar equipment, but space was limited in the SUV, so I left it all at home. In the afternoon, I attended several of Friday's presentation, including Don P's talk on Amateur Radio Astronomy. Don did an excellent job explaining what basic equipment amateurs needed to get started in radio astronomy. Then I listened to Jason Kendal, the NASA Ambassador from the NYC area give an update on the new Martian Rover - Curiosity. After that presentation, I went for a much needed nap. While walking back from the talks we ran into Ray and Shelly M from the Kiski club who had arrived and setup camp several rows away from us. At sunset, the Bob's and I uncovered our scopes and then went for a stroll around the observing field. There was quite a large crowd, though not as packed as we've seen it during past conventions. Here are a few field pictures of the great looking telescopes setup around the observing field: http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-18.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-19.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-20.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-21.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-22.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-23.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-24.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-25.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-26.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-27.jpg

After getting back from our stroll, I took the Stellacam-II camera off of the 80mm refractor and attached it to a 5.5mm - 50mm CCTV lens and mounted that on a camera tripod. Tonight I was going after widefield shots of the Milky-Way and the constellations that I had been video-imaging in the previous nights. I also wanted to try out my Celestron NexGuide self-contained autoguider with the 80mm refractor. Here are a few night shots with the CCTV lens of the campsite: Looking due south past Bob K's and Bob N's telescopes with the stars of Centaurus over the trees:

http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-28.jpg Looking north with Cassiopeia rising:

http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-29.jpg and one of Bob K using his binocs looking at a satellite going over. http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-30.jpg the dippers in trees, the Sagittarius Milky-Way, And the Galactic Dark Horse: http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-31.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-32.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2012-32.jpg http://home.comcast.net/~lemastro/vidcap/images/galatic-dark-horse-8sec-12mm-06152012text.jpg I then went to work trying out the NexGuide Autoguider. While I have had the unit for over a year now and played around with it a few times in my backyard observatory, this was the first time that I really made an effort to get it to work. Bob K pitched in and gave a hand with it, helping me with changing some of the Celestron CG mount settings to work better with the autoguider. Also based on his experience with PHD, Bob had plenty of good advice on what corrective rates to try using. After several adjustments we were able to get the setup to track and guide between 90 - 120 seconds without too much eggshaped stars. With some more experimenting back home, Bob thinks that I can get a much longer tracking time. Dennis was also interested in seeing how the NexGuide worked as he had an earlier accident with his autoquider . It slipped out of the guidescope and hit the concrete pad that he was setup on, and that was the end of his autoguider camera. (Dennis ended up buying a NexGude from Jeff on Saturday). Here's a few images that I took at 90 second guiding: http://home.comcast.net/~lemastro/vidcap/images/m8-90sec-06152012.jpg http://home.comcast.net/~lemastro/vidcap/images/m16-90sec-06152012.jpg http://home.comcast.net/~lemastro/vidcap/images/m17-90sec-06152012.jpg http://home.comcast.net/~lemastro/vidcap/images/m51-90sec-06152012.jpg http://home.comcast.net/~lemastro/vidcap/images/m81-90sec-06152012.jpg http://home.comcast.net/~lemastro/vidcap/images/m101-90sec-06152012.jpg While not the best, I was very happy to go that long for my first time of really using an autoguider. Now I just need to practice more and get better at autoguiding.

I ended up staying up much later than I had planned, and finally went to bed with the eastern sky once again lighting up from dawn.

Saturday 06/16/2012:

Dragged myself out of bed late morning when the camper became too warm. Did the usual morning routine of letting the telescope dry off and charging batteries while eating breakfast.

While sitting around doing a little reading, Ray M stopped in and mentioned that there was an Astrovid 2000 videocamera over on the swap table. After borrowing it, we verified that it worked back at my campsite, using my 80mm refractor and pointing the camera at the trees. Ray decided that he wasn't going to buy it, so I ended up getting it.

Always wanted the AVA precursor to the Stellacam line of astro video-cameras. http://home.comcast.net/~lemastro/astrovid2000.jpg

At 2:00pm, we headed over to hear the park ranger Chip H and Dark Sky Fund Max's update on Cherry Springs. Then I stayed around for the first half of the keynote speaker David Eicher's presentation on the future of astronomy. I didn't stay for the whole talk, as I really needed to go back to camp and take a nap for a couple of hours. Along the way back, I stopped in a nd signed up for the public viewing that night. At 5:30pm, all of the attendees assembled for the raffle drawing. This year, the Kiski club didn't have any luck, and none of us won anything. There's always next year,,,,,

By 7:00pm, the public had begun trickling in for the stars-n-park program across the road, and was wondering about the observing field. I plugged in my DVD videoastronomy demo and before long had curious folks stopping in with questions. The weather forecast was calling for mostly cloudy skies that night, and there was a thick haze around most of the sky. Bob K decided it wasn't worth it and broke down his telescope. Bob N soon joined him in tearing down. I decided to leave my telescope up, in case we got a few suckerholes that I could slew too for the public viewing. Once it started to get dark, I began doing just that, starting with the bright globular cluster M13 in Hercules. Later, as it became darker, and the sky actually started to become clearer, I went to various objects such as the Ring Nebula - M57, and the Whirlpool Galaxy - M51. Only after midnight, when

Ring Nebula - M57, and the Whirlpool Galaxy - M51. Only after midnight, when most of the public had left, did the southern horizon clear out and I showed the few remaining stragglers the Swan Nebula - M17.

Leaving the telescope on the Swan, I walked around and visited with Dennis, Don, and Eric, and had a look thru their telescopes. Was getting tired and it had been a long week of late -night observing, so I packed it in around 2:00am.

Sunday 06/17/2012:

After 3 good nights of video astronomy observing, and 1 public night of group observing, I was wore-out, so I slept in till near 8:00 am. Barely made it up in time to say goodbye to Bob K as he pulled out. After a quick bite for breakfast, spent the next several hours packing in the telescope and camp. During that time, I saw Bob N off home. Once I was ready I walked over to make my goodbyes to Dennis, and the gang from Canada - Don, Jim, and John. Look forward to seeing them in September! So this concludes this year's 2012 CSSP Convention!

I'll have my video-observations of the various deep-sky objects that I imaged over the past week processed and online sometime later this summer. That will include five new constellations: Libra, Ursa Minor, Draco, Lupus, and Centaurus, with over 81+ new deep sky objects video-captured. Please visit my Constellation Tour page at: http://home.comcast.net/~lsmch/constellationtourl.htm

Larry McHenry Astronomical Webportal: http://home.comcast.net/~lsmch/