

## Calhoun Stargaze 2016

### Friday 9/30/2016:

Left Pittsburgh at 10:00am and headed south via Rt51 to Uniontown and then onto Toll-43. Took 43 down thru Cheat Lake to the I-68 interchange and then on to Morgantown WV where I picked up I-79. Once on I-79, the weather deteriorated just past Clarksburg, and I ended up driving through a mountaintop thunderstorm. Visibility was near zero with heavy rain, I would have pulled over, but I had gotten stuck in the center lane and couldn't see out of either side-mirror to tell if it was clear behind me. So I just maintained highway speed and kept driving and eventually came out of the storm,,, that was 15 minutes of white-knuckle driving! After about another 20 miles, I came to the Rt5 Burnside exit and was soon driving under partly sunny skies.

Arrived at Calhoun Park around 2:00pm and stopped at the Red Barn to register and say hello to Cat W. and Tim E. from the ARC who were already there, along with park officials Shirley B. and Roger J. and with WVU extension agent Jamie M. There were several other astronomers from Columbus already setup on the pavilion ridge above the barn including Chuck G. and Tom W., and local astronomer John D. and his friend Shawn.



While Cat, Roger, and I were upstairs in the barn looking for a projector screen, Denny H. of the Kiski Astronomers arrived. This was Denny's 1st time to Calhoun so I gave him a quick tour of the barn. We then drove our campers up to the southern observing field and after picking a spot that had good sight-lines, quickly setup camp and assembled our telescopes. As usual, I had my C8 optical tube mounted on a CGem with the Kson 80mm and Arcturus 60mm refractors piggybacked, along with my StellaCam-II and SC-3 deepsky videocameras and a ZWO ASI120MC autoguider. Denny setup his new Williams Optics 71mm.



We were a little hesitant on pulling out our equipment as while there were storms to both our east and west, it remained clear overhead. But, as we were attaching the optics, the sky began to cloud over, and just as I was finishing balancing the telescope, it began to sprinkle.



Denny and I quickly covered the telescopes and closed the window on our campers and cars and headed inside to ride out the storm. I took the opportunity to get my teardrop's interior ready for sleeping.



By 3:30pm, the rain had stopped and the sun came back out, so we finished arranging our camps and I got the solar panel going to charge my camper batteries. At 4:30pm, we decided to walk down to the Red Barn for dinner at 5pm. Around the bend we ran into Chrissie and Rich C. with their R-Pod camper setting up in the small campground between the observing field and barn.



At the barn, most of the attendees who had arrived for Friday night were hanging out, waiting for the spaghetti dinner. While at the barn, the sky went back to overcast with an occasional shower going over.

At 7:00pm, we decided to head back up to the campsite and soon a harder rain drove us inside for the night. I pulled out several National Geo magazines to read and surfed the net for several hours. The Verizon Cell service is excellent from up on the observing field. The rain kept up its tapping on the camper roof throughout the evening, with an occasional hard downpour going over. Finally at 10:30pm, couldn't keep my eyelids open, so I headed for bed.

**Saturday 10/01/2016:**

Woke up at 7:30am to a heavy fog, but at least the rain had finally stopped. The weather forecast showed some promise for sunny skies later in the day and a good chance for some observing that night. With all the heavy rain we had overnight, there was no sign of standing water on the field and it dried quickly. The old golf course drainage system must have been pretty good and still functioned.



We headed down to the barn for an awesome breakfast from Tudor Biscuit World and a shower. At 10:00am we held a small swap-meet and I made a few bucks. We stayed around the barn and talked about the park and astronomy with everyone until lunch was ready. The folks from Calhoun Park put out quite a spread! Normally when I go on camping trips I usually loose a little weight, but this trip I think I added a few pounds by the time it was over.



After lunch, Tim and Cat gave a status update on developing Calhoun as a dark-sky park, and Tim showed an interesting video that talked about how night sky tourism was going to be the 'next big thing'.



Then the Fairmont State University students lead by senior design student Erin T. presented their revised site plan for the park. Once again, they did an excellent job with their presentation, and generated a good discussion on the future of the park.



By then most of the one-day attendees that were arriving on Saturday had checked-in, including Al P. from Pittsburgh and Jane C. and Bill from the Charleston club, both event committee members. After The FSU students had wrapped-up, Denny and I met them back up on the observing field where we walked around the field and talked with them about alternatives to putting in the new road and other improvement ideas for the field, such as running electrical power. The observing field is a really good location with good horizon sight-lines, particularly to the east running due south. The south-western edge of the field could use a little tree trimming to improve the view in that direction.



Having missed Phil C.'s presentation on Atmospheric Extinction affects on stargazing, Denny and I went for a stroll up the pavilion hill to visit with the Columbus astronomers' setup on the ridge, including Chuck, Tom, Phil, and others. We talked about the light dome from last night visible to the SW that came from the local high school football game.





We then headed back down to the barn to sit in on Bill C.'s talk on Amateur Radio and Astronomy, and also caught the tail-end of the NASA Educator presentation by Pam C out of the NASA Fairmont office.



Then it was time for dinner, a delicious chicken and baked potato meal followed by cherry or apple pie. After gorging ourselves, Denny and I headed back to camp to finish preparing our telescopes for observing that night. Once we had everything ready, we walked back down to the barn to catch the keynote presentation by local native and professional astrophysicist Jeff B. of Colgate University on star and planet formation. It was a very interesting talk.



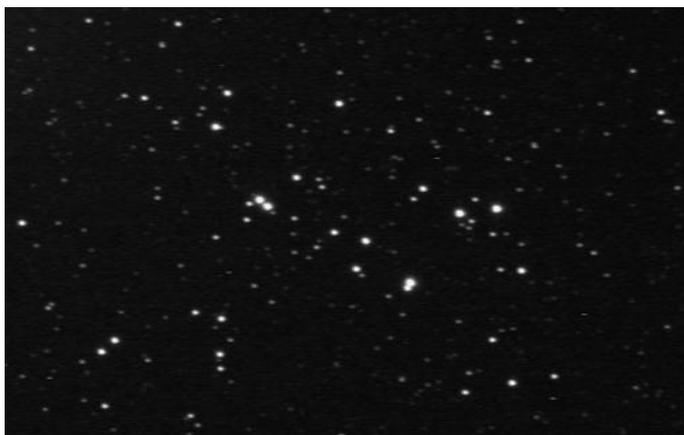
Then I hiked up the hill to the ridge top pavilion to give a green-laser tour of the night-sky. During the earlier keynote presentation, a wave of clouds has roiled in, obscuring most of the sky. So I started off the tour by pointing out the planet Venus brightly shining thru a sucker hole in the west and then discussed what and where constellations came from. As the clouds gradually cleared, I began adding in constellations and stars to the discussion, along with various myths and lore associated with them until eventually I was able to show everyone the Milky-Way glowing above in the Summer Triangle down thru the heart of our galaxy in Sagittarius. With that final note, I wrapped-up the night-sky tour and headed back to camp.

Denny was already entertaining a group of locals, but they soon left. I quickly uncovered my telescope and powered up the cameras and laptop. After a delay from clouds, I soon had the mount perfectly aligned using the Polemaster. Then halfway thru the GOTO align, clouds moved back in and I had to abandon that process for awhile. Finally, the sky cleared off enough by 11:00pm for me to successfully initialize and calibrate the mount and use the Bahtinov masks to fine focus the cameras. I was ready to video-capture my first object and I started over in Aquarius with a small galaxy - NGC7230 that had eluded me up at the Black Forest Star Party over Labor Day. After bagging that, I moved up to Aries high in the eastern sky to hunt Herschel Objects. This took awhile, as I was interrupted by an occasional cloud. I pulled in a number of faint galaxies from within the Ram including NGC771, 774, 784, 791, 924, 990, NGC1030 and 1056.



By then it was past midnight and heavy dew had descended on the equipment along with an occasional wisp of fog floating thru. I had started off with the dew heaters on low, but I now cranked them up to high to keep the dew at bay. With another cloud band passing over, I decided to head inside the camper to warm-up and end up taking an unintended snooze for a good half-hour. After rousing myself, I headed back outside to find the sky once again clear.

With the last Herschel Object in Aries captured, I headed over to the Charioteer rising in the northeast to video-capture several small Herschel clusters there in Auriga. These included NGC1778, which displayed nicely on the video-monitor.



With the time heading past 2:00am, and fog beginning to finally thicken, along with increasing clouds gliding in from the west, Denny called it a night. I decided that my last object for the night would be a small faint galaxy, NGC2387, near the border of Auriga with Gemini the Twins. I had to wait a few minutes for it to clear the tree-line over in the NE, keeping my fingers crossed that I could capture it before the clouds reached that section of the sky. My luck held out and I was able to get in the video observation with minutes to spare. But by 2:30am, the entire sky had closed-up, so I powered down the telescope, covered up the sopping wet equipment and headed in to bed. While I had to spend a good deal of time dodging clouds, overall it was a good productive night of video-astronomy!

### **Sunday 10/01/2016:**

Sunlight streaming in the camper windows woke me at 8:00am. Denny being an early riser was already up and sitting outside drinking tea. I quickly packed the inside of the camper and after I had dressed, stepped outside to a wetter field than I had expected, Denny told me that it had rained around 5:00am, which explained why I had a puddle on my outdoor camp table. Denny and I headed down to the Red Barn for another great breakfast!

While there we compared observing notes with the other astronomers who had all stayed on the ridge. Al P. introduced me to Rene and her son Scott from the South Hills who had come down on Saturday for the event. Scott had taken some great wide-field DSLR photos the night before over by the fishing pond and shed. I look forward to seeing his final images. With breakfast ending and folks beginning to head out, we made our goodbyes to the other attendees, Cat, Tim, and the great park staff, and headed back up to the observing field to break camp.

As we were finishing up, Craig from Dublin stopped up to visit and the three of us walked along the southern tree-line of the observing field. We feel that if the park would do a little tree harvesting along the edge, it would greatly improve the southern sky horizon.



Denny then finished hooking up his camper to his truck and we said goodbye to Craig and pulled out. We stopped down at the Red Barn where Chrissie and Rich were taking a break before heading home. Denny and I walked up to the large field along the eastern edge of the park. It also has potential for doing astronomy from that location, but the park likes to use that for other events. We finally rolled out of the park shortly after noon, and I made it back home by 4:00pm.

The first annual Calhoun Stargaze was in the books! Overall, it was a good event and a great first start!

Larry McHenry

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