

## Calhoun Stargaze - October, 2019

After experiencing almost two full weeks of clear October weather, with the New Moon period at month end approaching, the weather pattern went back to being unpredictable. The forecast for the weekend of the Calhoun StarGaze wasn't very promising. But those who could make it down south early to Calhoun on Tuesday and Wednesday nights were lucky. Unfortunately, I had to work Thursday morning,,,,,

### Thursday 10/24/2019:

Having packed up the camper and astronomy gear the night before, I left Pittsburgh around noon and after a couple of stops to gas-up the SUV, and pickup lunch, I arrived at the park right at 4pm. On the drive down, along I79 in the mountains, the fall tree colors were spectacular. There were 8 of us on the ridge, Ed K from the Kiski Astronomers, Frank W from Pgh, Nate from Tenn, John D of the Calhoun Stargaze committee, and Chuck from OH, and a couple of other campers that I didn't have time to meet. Also, Warren and Stephanie had their RV down in the campground. Ed saved me my usual spot and introduced everyone there to the 'Pittsburgh Chair' concept. LOL! According to those who were there earlier in the week, both Tuesday and Wednesday nights were excellent! Chuck, John, and Ed told me that Wednesday night was chilly, no dew, but everything was covered by frost at dawn.



Shortly after I arrived at Calhoun, Park Board members Donnie and Roger, along with additional help started work on installing new electrical conduit along the ridgeline and placed a new wooden power post (with 8 new duplex 110v outlets) toward the center section

of the ridge. This will be useful for future visiting amateur astronomers who have larger RV's that are too large to fit down at the narrow end of the ridge, but still want to setup on higher elevation than the campground.



I had to hurry with my setup, but by sunset I had everything ready to go, including my telescope: 8" Celestron SCT optical tube @ f6.3, mounted on a CGem, along with an 80mm refractor and a 60mm guide scope. My new ZWO-ASI294MC Pro camera was attached to the 8" SCT and the old Stellacam-3 video-camera was on the 80mm, with the ZWO-ASI120MC on the 60mm, used as an autoguider. Also, a QHY PoleMaster USB camera on the mount for polar aligning. In addition, I had my home-made all-sky cam setup on a near-by small table, which consisted of a ZWO-ASI290MC camera with the stock fisheye lens mounted in a small security-camera dome. I had the all-sky cam's USB connected to an old XP laptop running FireCapture taking an auto-exposure every 30 seconds. I planned to stack all the subs later to make a video. Here's the YouTube link: <https://youtu.be/qre0K2DOCbo>



Most of Thursday night was really good!! Started off perfectly clear at sunset, (and warm too - I stayed in short sleeves till after dark when I had finished polar aligning the mount and initializing its GOTO). I pointed out to Ed and John the pink and dark blue 'Belt of Venus' (Earth's shadow) that was visible to the east. It didn't take long before the late fall Milky-Way was shining brightly in the South-West. It showed good star-cloud structure was very nice! Here are a couple of pictures from the all-sky cam.



Left = "Belt of Venus". Right = Orion rising. (I need a wider field fisheye lens!)

My observing plan for the night was to continue hunting the ~120 Herschel Objects that still remained from my years-long survey project. All of these were located in Ursa Major, which was low on the northern horizon. While I waited for the Herschel Objects over in the bowl of the Big Dipper to rise higher in the NE, I spent time imaging NGC891 in Andromeda, NGC6946 in Cepheus, and the Helix in Aquarius.



Under my camper clam-shell with the curtains hanging down, (and running my little heater), it stayed a balmy 60 degrees, but the outside air temp fell into the upper 40's. While the camera was stacking, I walked around the observing ridge a few times and visited with the other guys.

Then around midnight, I made an unforced error, went to microwave a can of soup and forgot to turn off the heater! Blew the outlet that I was plugged-in too. That crashed the imaging laptop, losing a good 30 minute image stack that I was working on, and knocked-out the power to the telescope and cameras. I was able to recover the telescope alignment fairly easy by manually moving the RA/Dec back to its index settings, powering it back on and selecting the 'last alignment' option and then just syncing on a star. But for awhile I thought my USB hub was toast, as it would not power back on. I unplugged it and let it set for a bit and then plugged it back in. It must have reset, as it was now working. Then I had to go back and restart imaging the galaxy that I wanted. Set me back a good hour.

By 1:30am, light clouds had started to hover over in the south-west sky, so I moved on to my Herschel project and spent the next several hours over in the NE capturing faint galaxies. Picked up a total of 16 new objects. These included galaxies NGC2684, 2693, 2701, 2726, and several nice pairings - NGC2814, 2820, and 2854 & 2856.



(NGC2814 & 2820)



(2854 & 2856)

Then around 3am, the clouds started thickening, and it was all over by 3:30am. After shutting down and covering up the equipment and making a walk down the hill to the restroom at the Red Barn, I was finally in bed by 4am. (That walk uphill is a killer!)

**Friday 10/25/2019:**

I slept in till about 10am Friday morning, wakened by the noise of the other campers packing up. By then Ed, Chuck, and several of the other tent campers had packed-up and left for home. After checking the weather forecast and seeing that it had gone downhill now for Friday night, I joined Frank and Nate in packing up my telescope equipment. I then went for a stroll over to the new observing field to see where the foundation work for the new 'Astronomy Cabin / Observatory' was going. It's along the gravel road that runs around the northern perimeter of the field, about mid-way. That should be a good location for it. It's exciting to see progress on the observing field finally happening! I think this new facility will be the key in fully developing the observing field as an astronomical park destination.



While I was packing away my astronomy equipment, I was thinking of staying over Friday night to catch-up on my sleep and drive home Saturday, as I didn't want to tow a camper thru rush hour. But after I got back from the walk, I was talking to John who hadn't yet left, and he told me he thought there might be a home football game at WVU on Saturday, and that I79 would be a parking lot. So, as all I had left to do was unplug the camper and crank up the stabilizer jacks, I decided to head home to Pittsburgh. After saying goodbye to Rodger and Donnie, who were back on the ridge working on the electrical conduit, and to John who was now packing up his camp, I headed out from the park, made a stop along the way for gas, and got back home at sunset, a little more than 24 hours after I had left for Calhoun!

Well, this ended up being a short trip for me. Even though this year's starparty was a bit of a weather bust, I still enjoyed the one night that I had, being able to spend time under the stars with other amateurs and getting in some great observing! I once again look forward to future Calhoun Stargazes under dark skies!!!

Larry McHenry

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