Calhoun Informal Starparty – October 2017

Back at the end of August, during a meeting of the Calhoun StarGaze Committee, one of the members, John D, brought up the idea of a fall no-frills starparty. It would be just a weekend of observing, no programs or meals, with the Red Barn available for use. Everyone on the committee, including the park, thought it was a great idea. So a date was chosen and the announcement was listed on CloudyNights and an email sent to all the previous attendees of the spring event that an informal starpary would be held at Calhoun Park Friday and Saturday October 20th and 21st. So, being one of the 'instigators', I decided to maximize my observing opportunities and headed down to Calhoun a day early.

Thursday 10/19/2017:

The weather all week in Pittsburgh and the Northeast had been awesome! Cool sunny days and clear evenings. I finished packing my camper and astronomy equipment was soon on the road southward toward Grantsville WV. Arrived at the park mid-afternoon to find Tony (and his dog Otis) setup in the mid-section of the ridge. Tony had been there for several days with a group from the Columbus Ohio club, most of who had to head back home that day. Tony was planning on one more night of great observing that they've been having all week before heading home on Friday. Also, Warren and his wife Stephanie had pulled in with their camper before me and had setup over in the small RV campground.

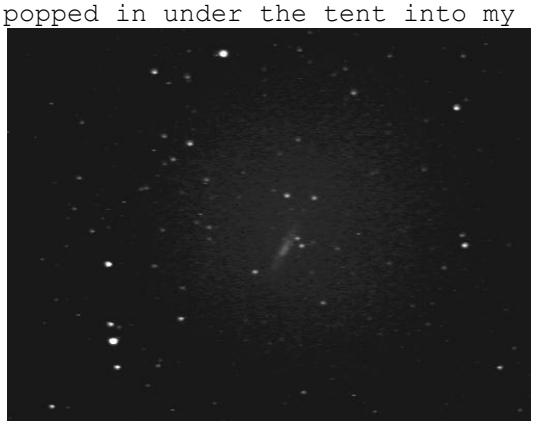
I pulled in to my usual Calhoun 'spot' on the ridge above the Red Barn, next to the pavilion and setup camp and assembled my telescope: 8" SCT optical tube on a CGem mount. Instead of piggybacking my 80mm Kson Refractor like I normally do, I decided to mount a Canon 25mm – 100mm zoom CCTV lens with the StellaCam-II as a very wide-field video finder. At the BFSP, I had picked-up a set of rings and a mounting block for the lens so I wanted to see how well it would work with the 8". I had to move the 60mm guidescope and ZWO ASI120MC camera down on the side of the 8" tube, and needed to add another 50mm finderscope to the other side of the tube to balance everything out. Depending on how well the Canon CCTV lens works, I'll have to come up with a better way to mount the guidescope.

A little later in the afternoon, Shawn from Fairmont arrived and setup next to the small playground with his 8” Meade SCT that he used visually. And John D from Parkersburg showed up at sunset and took the space in front of the playground with his 10” dobsonian.

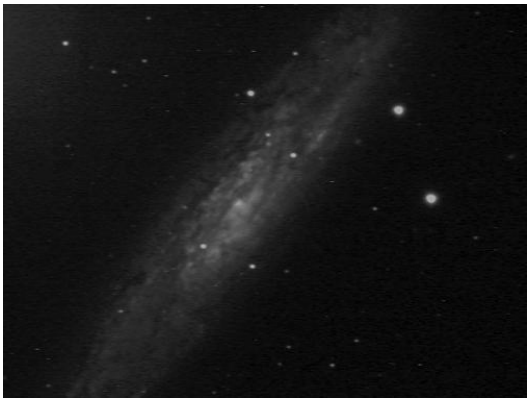
The Sky had been beautifully clear all afternoon, with a light warm breeze. It was T-shirt weather and I almost changed into shorts!! The air was very dry, with jet contrails quickly evaporating behind them, not leaving the long wispy trails. At dusk, I uncovered the telescope and prepared my observing plans for the night. I decided to work on video-observing Herschel Objects in Draco over in the northwest, and later in the evening over in Lynx to the northeast. In addition to the main scope, I also setup my Samsung SDC435 videocam with a fisheye lens and started capturing time-lapse images.

I soon had a good polar alignment, thanks to my Polemaster mount camera, and then worked on aligning the GOTO. This is where the gremlins dropped in for a visit, as it took me three tries before I finally got it right. Doesn’t help when the star you think you’re aligning on is really a different one. I then ran into computer issues where my laptop’s planetarium program, ‘Earth Centered Universe’, ECU, wouldn’t connect to the telescope via ascom. It kept throwing an error message about running Win95!! After wasting nearly an hour troubleshooting all the connections between the telescope and the computer, including multiple power reboots of each, I finally pulled out a extension cable for the telescope’s hand-controller and ran the controller over to my workstation at the camper back tailgate. No easy computer ‘pointing & clicking’ tonight, I’d have to manually enter each object via the hand-controller.

With that issue’ resolved’, I was finally ready to start my observing session, only now the sky had gone bad! The jet stream had brought in a widespread swath of hazy sky down from Canada. Even the folks up north at Cherry Springs were impacted. (killing some time, I called Denny H who was at the park, and he told me they had the same hazy conditions there). I did manage to take advantage of the occasional opening to video-observe the Sculptor Galaxy - NGC253, the Deer Lick Galaxy – NGC7331, and Stephan’s Quintet in Pegasus that John D wanted to see with my setup. Shawn and Warren, who had walked up the hill to visit, also popped in under the tent into my ‘darkroom’ for the views.

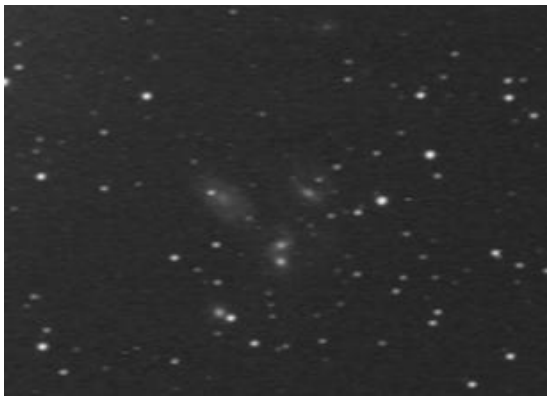


NGC253: Canon 100mm



NGC253: 8” SCT f6.3

NGC7331: 8” SCT f6.3



Stephan’s Quintet: 8” SCT f6.3

After these few observations, the haze thickened and the Milky-Way disappeared. The dew also began to lie heavily on the telescope tube, so I cranked the heaters to high to keep the optics dry. Spent the next couple hours shooting the breeze with the guys, waiting to see what the sky was going to do.

Around 1:00am, the haze started to move out and the sky mostly cleared, with the south-southwest staying more ‘milky’ than usual. By then Draco was too far toward the horizon, dipping behind my camper, so I waited a bit more for Lynx to rise higher for good viewing. Finally I was able to begin working thru the Herschel galaxies in that constellation, video-capturing 35 new objects, most being faint fuzzies. Some of the best were galaxies NGC2532 and 2543, nice little face-on spirals. With the clock now past 4:00am and having caught the last galaxy on my list for Lynx, I parked the telescope and powered down the video equipment and computer, and headed for bed. Not too bad of a night after all!!

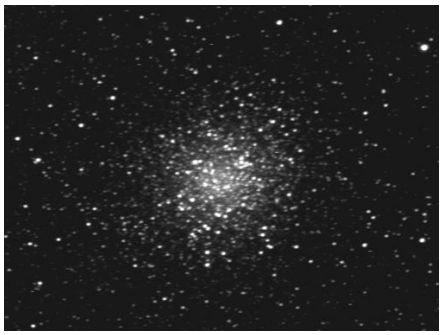
Friday 10/20/2017:

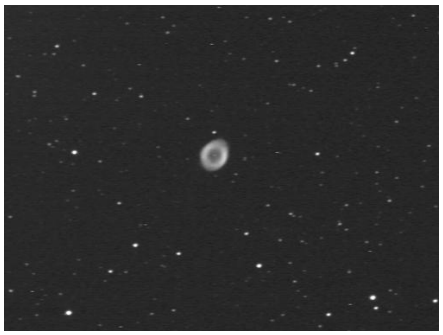
Slept in till 10:00am. After breakfast and visiting with John and Shawn, recapping our observations from the night before and discussing the plans for the new astronomy field at Calhoun, I uncovered the telescope to dry and headed down the hill to the Red Barn to clean-up. After a late lunch, Warren, Shawn, and John went for a drive into Grantsville for a few supplies, and I went inside my camper for a nap. That afternoon more astronomers arrived, including Craig who went next to Shawn’s camp, Andrew and his 22” f4 truss tube dob, who headed over beyond the barn to setup on the future observing field, and Ed K from the Kiski Astronomers who pulled in next to me. Also Jane and Ed from the Charleston club pitched their tents along the ridge, next to Craig. While the sky wasn’t quite as clear as yesterday, it was warm and sunny, so I ended up getting a little sunburned.

At sunset, a family from the local girl scouts visited the hillside and asked if they could bring the entire troop over on Saturday night. We told them sure! And I offered to give a green laser tour of the sky for them. Also, a couple of local high-school seniors, (Brie and Nick), stopped by. As one of their school projects, they were researching what brought amateur astronomers to Calhoun. Ed and I explained to them the uniqueness of Calhoun’s dark sky that attracted us, and we were soon showing them various examples of deep-sky objects with our equipment. Contrary to the weather forecast, the sky was beautifully clear, with the Milky-Way brightly visible from Perseus in the northeast over

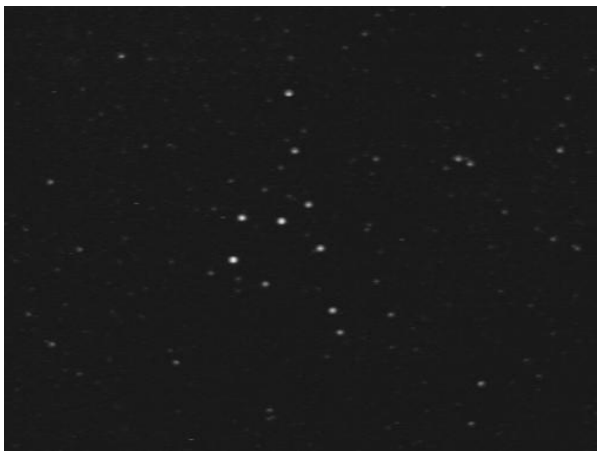
to Sagittarius setting in the southwest. The air temperature was a little cooler than the night before, dropping into the upper 50's, but the dew wasn't as bad.
A little later that evening, a group of WWV engineering students arrived to camp out over the weekend for the Orionid Meteor shower. I spent some time showing them some of the Messier Objects over in the southwestern sky – open cluster M7, globular cluster M22, and higher up in the sky the Ring Nebula – M57.


M7: Canon 100mm


M22: 8" SCT f6.3

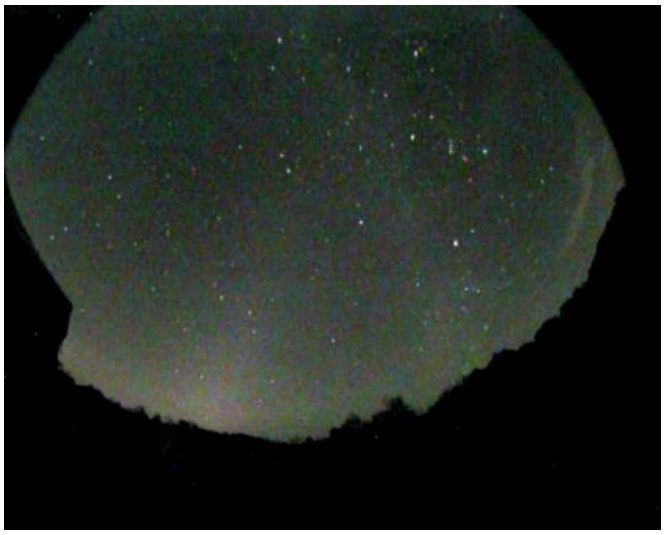

M57: 8" SCT f6.3

I then moved on to working Herschel Objects in Draco that I had missed the night before. Was able to video-captured a number of small faint galaxies including NGC4210, 4572, 4693, 4749, and 5667. With the dragon wheeling lower toward my camper, I moved higher in the sky to little Sagitta the Arrow to hunt Abell planetaries including Abell59 and 63. While in the area, I stopped by the 'Coathanger' CR399 and got an image with the little Canon 100mm zoom CCTV lens. It was working out nicely at various ranges from 25mm to 100mm and was a good match for the half-inch CCD chip in the StellaCam-II.


CR399 - Coathanger: Canon 100mm

I then moved over to Cepheus the King, high in the north, to video-observe Abell75 and 81. All of these Abell planetaries are very, very faint, even with a 3 minute exposure with the StellaCam-3 thru the 8" SCT at f6.3. While some were bright enough that I didn't need to use the O-III filter, it made a difference on a number of others.

Next to me, Ed K spent the evening imaging with his Schmitt-newt. He also was experimenting with a fisheye lens on his QHY camera, doing wide-field in hope of capturing meteors. (I think we only seen a handful the entire night, kind of a bust). Shawn and John decided to hike over to the far field and spent some time with Andrew observing with his 22" dob. They reported back the very nice views that it showed. Throughout the evening, you could hear multiple packs of coyotes calling to each other across the park hills and yipping all night. Glad there were other astronomers there with me! I mentioned the 'singing' the next day to a couple of the local girl scout parents, who then told me that they also now had bear sightings in the county!! Just like CS!
By 2:30am, I was finally getting worn-out from the night before, so I called it a night.



The next day I checked my fisheye time-lapse capture and had a nice shot of the zodiacal light around 6:00am rising above the horizon in Leo. Here's the Youtube video: https://www.youtube.com/watch?v=wrKQevE_RyA

Saturday 10/21/2017:

Woke to a partly sunny, hazy sky. Time E from the University of Tenn/ARC arrived at the park a little before noon, and he, Ed, John and I walked back to the future observing field. On the road back to the field, we met Andrew driving out with his scope packed, needing to head back home to N.E. Ohio. We then dropped in on the WWV students.

And visited with Warren and Stephanie at their camper.

Once at the future site of the observing field, we walked the site, taking notes on the site-plan that I had printed. When the funds finally get released by the state, hopefully soon, the park will get moving on building out the site, including electrical outlets, new access roads, and a new modern restroom/shower facility. That will really make Calhoun a great dark sky destination!

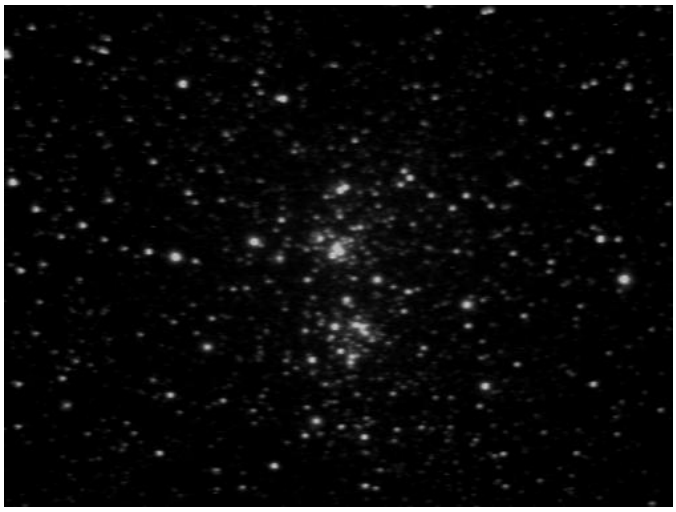
We then spent the afternoon back at camp, visiting and watching the hazy skies slowly thicken into a general overcast. It was not looking good for any observing that night. Late in the day, Ed and I walked over to see the historical village and on the way back stopped by Tim's camp to visit and see his drone. Tim also had a cool 360 degree fisheye camera that transmitted to his cell phone. We then dropped in on Shawn and helped him figure out how to get his DSI camera to focus with his 8" SCT. Back at camp, I made another attempt to fix the Thursday night communication issue between ECU and the telescope mount, and was finally able to get the two to 'talk' by re-installing the planetarium program.

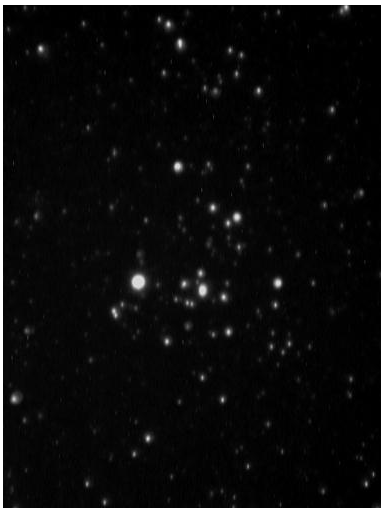
After dinner, I changed into my cool weather observing clothes and uncovered and powered up the telescope. The hazy skies had started to clear partly, so while it wouldn't be a good night to chase faint fuzzies, it would be an 'OK' evening for clusters!
At sunset the girl scouts and their families began to arrive, and before long there were about 30 some people visiting us. For the next couple of hours, John, Shawn, Craig, Tim, Ed, and I took turns showing them our telescopes and observing various bright objects.

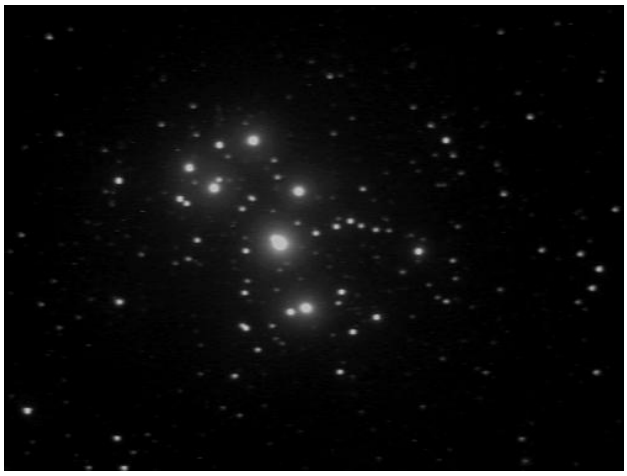
We started off with the planet Saturn, whose rings and moons were a crowd pleaser. Once dark, we moved on to the brighter deep-sky objects that were visible thru the clearing holes, including the Ring, the Swan – M17, open cluster M11, and galaxies NGC7331 and 891. All of the scouts were attentive and asked great questions throughout the night.

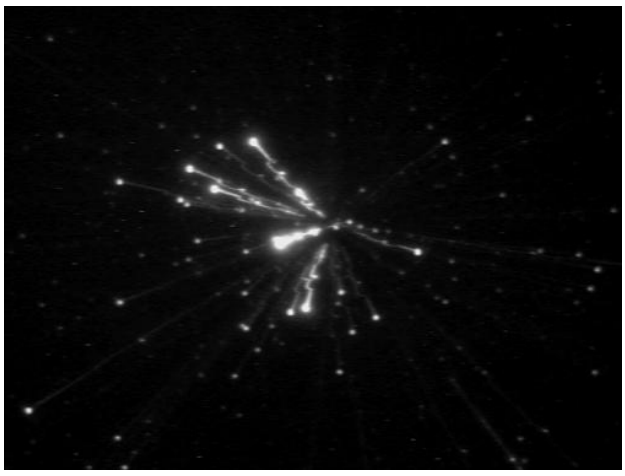
Using our green lasers, John gave a quick tour of the sky, and I told the myth of Perseus and Andromeda, pointing out the constellations involved as I talked. I then pointed out the dippers and told several stories about the Great Bears – Ursa Major and Minor from some of the cultures around the world. The scouts and their families had a great time!
The local school seniors Brie and Nick also came back for the evening and brought with them a small 4" reflector telescope of their own. Ed K helped them find Saturn and gave them good pointers on using the scope, and Tim E talked with them regarding the plans for Calhoun. They were very interested in what we were doing, and would like to participate and bring more of their friends to future events at the park.

By 9:00pm, the last of the scouts had headed home for the night, so I turned to video-hunting Abell planetaries again. I hadn't got very far, only observing Abell54 in Vulpecula and Abell2 in Cassiopeia, when the hazy skies returned, putting an end to capturing faint objects. So I then spent some time trying out the Canon zoom lens on some brighter clusters, varying the lens aperture settings and f-stops, (25mm to 100mm and f1.8, f2.8, f4 to f5) on the Double Cluster, Melotte-20, Hyades, Pleiades, and Orion's belt and sword. Overall, I am pleased with how the camera performed, and I think it will be a good tool to use next summer for observing dark nebula and Milky-Way starclouds.









With the clock going on 1:00am, I checked the satellite weather image and concluded that the haze was not going to let up. I said goodnight to Ed and headed in for bed.

Sunday 10/22/2017:

Up by 8:30am. Ed was already packing his telescope and soon John and Shawn were up and loading their cars. After spending a few minutes stowing the indoor camper items, I moved outside and began breaking down the telescope and packing away the camping gear. Before long, Ed was ready and headed off back home. Another hour and I was finished packing and ready to toll. Said my goodbyes to the guys and started the drive back to Pittsburgh. Home by 3:00pm.

So overall, the three-day Calhoun Informal Starparty was a success!
Looking forward to my next trip back down south!

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