# LVAAS: Pulpit Rock - August, 2015

Back in late 2014, I was contacted by Sandy M the club president of the Lehigh Valley Amateur Astronomical Society to come give a talk on videoastronomy in the summer of 2015. After exchanging a few emails, we worked a plan where I would come out to eastern PA on Saturday August 8th and give the presentation during their annual summer meet at the club's Pulpit Rock Observatory, located near Hamburg, PA. I would be able to stay onsite with my Tab teardrop camper and spend the weekend observing.

The Pulpit Rock Astronomical Park is a 4.3-acre mountaintop site 1,600 feet above sea level on the Appalachian Trail. Here are a few pictures I gratuitously lifted from their website at <a href="http://lvaas.org/">http://lvaas.org/</a>



(LVASS)

(LVAAS)

As you can see, it's a large site with six separate observatory buildings.

## Friday 08/07/2015:

Headed out mid-morning for the 5+ hour drive to Pulpit Rock. It was interstate driving all the way to the Hamburg exit, where I wasted no time in making a wrong turn and ended up on the wrong side of town. The GPS was also a little confused, as it wanted me to get back on I-78 and head back toward Harrisburg. After a quick phone -call to Ron K, the caretaker of the astronomy park, I was soon heading the correct direction, and the GPS happily agreed. I soon met Ron at the main gate to the entrance of the mountain road up to the observatory. Ron advised me to take the climb in low -gear, as there was a particularly steep section near the top, (27% grade), that was notorious for overheating car transmissions. Ron wasn't kidding!! Driving that section, I had the accelerator to the floor, barely crawling along. Finally I made it to the top with the camper and pulled over in the field next to a large dome. Ron took me on a tour of the campus, starting with the big dome.





Inside, in addition to a classroom, office, and maintenance area, on the upper floor there was a large 40" cassegrain reflector. Unfortunately, the mirror was out being resurfaced, so I was not able to look thru it.



We then headed over to the next dome, housing a 17" casse grain reflector. Had some nice views thru this telescope!!!





The third observatory was a roll-off shed housing a 12" fl0 planetary reflector.



(LVAAS)

Next was an 'interesting' concept, using an old semi-truck cargo section with a sliding roof to house a 14" SCT. Also inside was a small bunkhouse along with a radio-telescope control-room.



(LVAAS)

Then there's a dome that houses a classical  $9^{\prime\prime}$  Refractor.







Finally, the last structure was a small shed that contained a 17" Coulter Dobsonian that could be wheeled out onto a concrete pad.



(LVAAS)

The LVAAS club members fondly call this building the "Serpentarium Observatorium".

Apparently, black snakes, (like the fella below), like to sun themselves on the concrete pad during the day, and then slither under the building door at night. When someone goes to open the building, they have to stand back and let the snakes come flying out first!

LOL!



After the grand tour, I setup camp and assembled my 8" SCT with my StellaCam-3 videocamera on a C-Gem mount, along with a StellaCam-II in a 50mm refractor piggybacked on the 8" optical tube.

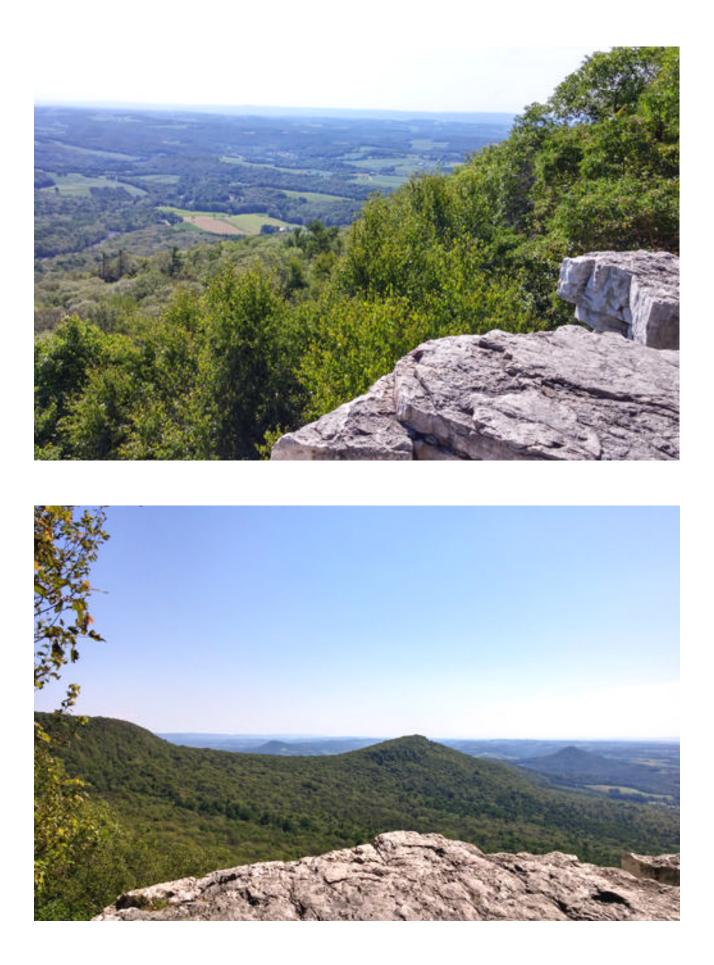


Once dark, I did a polar align and spent the evening working on my constellation survey up in Ursa Major. Added an additional 17 galaxies to my video-capture list, including faint fuzzies NGC4814, 5204, 5376, 5430, and 5585. Called it a night a little after midnight, as the long day finally caught up to me.

#### Saturday 08/08/2015:

After breakfast, I headed over to take in the view from the observatory's namesake: The Pulpit Rock overlook. From the large rock ledge, you could look out eastwards over the Lehigh Valley, stretching off to the horizon. With my binoculars, I could make out the office towers of Allentown in the far distance. Very beautiful!

Later in the day, Mike M, a member of LVAAS and a good buddy from Cherry Springs arrived and setup camp across the field next to the 17" dome.



Also, running along the overlook, and just a few hundred feet from the observatory grounds, was the Appalachian Trail. Throughout the day, hikers came and went. You could easily spot the day-trippers from the folks shouldering large packs attempting a thru-hike from Georgia to Maine.



The PA section of the trail is called "the destroyer of boots", and from these photos you can see why, jagged boulders strewn all over the trail. I went for my own several hour hike that afternoon, and was amazed how whenever the trail encountered a large boulder field, rather than detouring around, the trail went right over/thru it.



Late that afternoon, Members of LVAAS began gathering for the club meeting and starparty. A good sized crowd of about 40 amateurs pulled up chairs and attended the meeting, followed by my presentation on videoastronomy, which was well received. Afterwards, back at camp, I demo'd my equipment and had lots of interest and questions.





After sunset and once darkness settled in, I put the StellaCam's to work, showing on the camper's video monitors the celestial showcase objects in Sagittarius and Scutum, including M8 - the Lagoon nebula, globular cluster M22, the Swan nebula - M17, and the Pillars of Creation - M16, the Eagle Queen. Then went overhead to the Ring Nebula - M51, and the Dumbbell - M27. Had a great time showing the capabilities of videoastronomy!

Once the crowd died down, I went back to my constellation survey, picking up a number of obscure, open clusters in Cygnus: NGC-6856, 6895, 6989, 6991, 7024, & 7037, most of which are classified as 'non-existent', but clearly show as detached objects with the video cameras. I then worked a number of small planetary nebula in Aquila, including NGC-6741, 6790, 6803, and PK33-5.1, PK51-3.1, PK52-2.2, and PK52-4.1. Called it a night at 3:00am.

Earlier that afternoon, I had setup my Samsung videocamera and fisheye lens and let it capture images into the evening and until moonrise the next morning. It was interesting seeing the 'lights' along the trees, which the next day Ron explained to me were the flashlights from night hikers, traveling the Appalachian Trail. Below is a link to the time-lapse video that I made.



LVAAS club starparty at Pulpit Rock Observatory on 08/08/2015 video using a Samsung SDC435 video camera with an Arecont 1.55MM 1/2- F2.0 Fixed Iris, FishEye Lens. Time-lapse 1 frame every 30 seconds. Toward the end of the video, (before Moonrise), watch for night-hikers lights in the tree line on the right-hand side of the frame. The Appalachian Trail runs past the observatory grounds. <u>https://youtu.be/lq0-PWro34Y</u>

#### Sunday 08/09/2015:

Woke to a partly cloudy day. Mike and I consulted the various weather sites trying to decide if we should stay at Pulpit Rock or head to Cherry Springs. With the forecasts being 50/50 either way, we decided that as we were already had our telescopes setup and polar aligned, we would just stay at Pulpit Rock and take our chances. We spent the day reviewing the images from the previous night's work, visited the overhang a few times, went looking for snakes, and talked with the various hikers going by. Unfortunately, at sunset we realized that we had guessed wrong on the weather, as thick clouds rolled in at dusk. (found out later that Cherry Springs had clear skies after all) Spent the evening reading and watching a movie inside my camper.

### Monday 08/10/2015:

A hard driving rain hitting the camper's roof woke me at dawn, so I rolled back over to sleep. Finally dragged myself out of bed at 8:00am and with no sign of the raining letting up anytime soon from the weather radar, resigned myself to packing up the cam per and telescope in the rain. That was NOT fun! Mike finished packing about the same time, so we both headed down the mountain, Mike to home, and I on to Cherry Springs.

Thus ended my trip to the Pulpit Rock Observatory in Lehigh Valley. It's a very interesting place, and the LVAAS a very friendly group of astronomers! Wouldn't mind going back sometime!

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