## Hidden Hollow Star Party 2010

It had been a few years since I last attended a Hidden Hollow convention. So this year, I joined a group from the Kiski Astronomers who were planning on attending. Hidden Hollow is a small gathering held by the Richland Astronomical Society at their Warren Rupp Observatory, located at the Hidden Hollow scout camp. <u>http://www.wro.org/hiddenhollowinfo.html</u> The camp is south of Mansfield Ohio on a tree shaded scenic hillt op.

Being in October, the surrounding forest displays beautiful colors. But depending on where you setup camp, they can somewhat limit your views of the sky.

http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-01.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-02.jpg

## Friday 10/08/2010:

Left home mid-morning and met Denny H and Dave K at the Giant Eagle in Cranberry. We hopped on the turnpike and caravanned over to Ohio, up to Akron, and then down mid-state to Mansfield. After a stop for lunch at the Mansfield exit Cracker Barrel restaurant, we proceeded on to the Hidden Hollow campground, where we joined Bob K at our usual Hidden Hollow observing spot in the lower RV field. Bob N arrived shortly afterwards. http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-03.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-04.jpg

The sky was a beautiful blue all afternoon, offsetting the red and yellow fall foliage.

<u>http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-05.jpg</u> <u>http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-06.jpg</u> We got our camps quickly setup, which was not as elaborate as we would do for a stay at Cherry Springs. Dave and Bob N opted for sleeping in the bunkhouse. <u>http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-07.jpg</u>

We assembling our telescopes and imaging equipment and waited for sunset. http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-08.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-09.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-10.jpg This was the 1st outing for my new Celestron CG-5 German Equatorial Mount, so my setup and alignment took longer than what I was used too with my LX200. I've mounted my old C8 Ultima SCT optical assembly on the new mo unt and have moved the LX200 to the permanent pier in my backyard observatory. http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-11.jpg Right away I ran into a counterweight balancing issue, as I had forgotten to take into account the weight of all three videocameras and their cables. With a little Kiski group ingenuity, we were able to solve the balancing issue by using an exercise leg weight, a pipe wrench, and bungee cord!! http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-12.jpg Once it was dark and I had successfully polar aligned the CG-5 mount and focused the three videocameras, (Samsung & CCTV lens @ 50mm, the StellaCam-2 on the 80mm Bosma Refractor, and the StellaCam-3 on the 8" SCT), I joined everyone else in going after Comet Hartley-2 passing by the Double-Cluster. We all agreed that it was not very impressive. Here are a few pictures: <a href="http://home.comcast.net/~lemastro/vidcap/images/HH2010-CH2.jpg">http://home.comcast.net/~lemastro/vidcap/images/HH2010-CH2.jpg</a>

After spending a few minutes admiring the naked-eye view of the Milky-Way, I then turned to my constellation survey project, starting with Andromeda. Here's a series of pictures of M31, the Andromeda Galaxy, that I imaged using all three cameras:

http://home.comcast.net/~lemastro/vidcap/images/HH2010-M31-Samsung-55mm-8sec.jpg http://home.comcast.net/~lemastro/vidcap/images/HH2010-M31-SC2-8sec.jpg http://home.comcast.net/~lemastro/vidcap/images/HH2010-M31-SC3-45sec.jpg

Throughout the early evening, the sky conditions were mostly clear, starting off with mild temperatures and few bugs. But, being located in north central Ohio did not make for the darkest conditions. There was a large light dome to the northwest from Mansfield, and the overall sky glow was generally bright. The sky was still better than what we have back in the Pittsburgh area, with the Milky-Way visible across the sky and the brighter M-objects naked eye. Bob K, Denny, and Bob N began imaging with their telescopes, while Dave was experimenting with a DSLR camera mounted on a little GEM mount, and he was also using tripod mounted binoculars for a little visual observing. Denny couldn't get a proper alignment out of his mount, so he soon gave up on his imaging program and went to visual observing. Later, he took a stroll up to the big 31" Newtonian at the observatory.

After several hours, I completed my video-observing of the more prominent deep sky objects in Andromeda. These included the following: **Open Clusters:** NGC752 and 7686, **Galaxies:** NGC80, 83, 160, 183, 252, 404, 679, 753, 818, 891, 910, 911, 7640, and M31. (the edge-on spiral NGC891 looked particularly nice in a 45 second exposure with the StellaCam-3).

I had to pause a few times to wait on several scattered lake -effect cloud banks to pass overhead. As we were all running off of batteries, with no electric on the field, I eventually had to start shutting down some of the electronics to preserve battery life. First to go was a small electric red reading lamp and the videomonitor for the wide-field Samsung CCTV camera.

After finishing with Andromeda, I quickly moved on to Perseus and picked off quite a few objects in that constellation, including the following: **Open Clusters:** NGC744, 869, 884, 957, 1193, 1220, 1245, Melotte-20 (Alpha Persei Association), NGC1342, and IC348. **Galaxies:** NGC1023, 1160, 1161, 1175, 1275 (Perseus A). and Nebulas: M76, and NGC1333. (NGC1275 was quite interesting as it is the heart of an Abell Galaxy Cluster, with at least eight additional galaxies visible on the monitor). Well past midnight, while still working thru Perseus, the laptop battery began to give out along with low voltage warnings from the field battery inverter so I was forced to sacrifice the StellaCam-2 videomonitor to power the laptop. Finally around 2:00am, the last monitor began to show low field battery effects and quickly began to fade. After over six hours of observing, I decided to call it a night and packed up for bed.

## Saturday 10/09/2010:

Saturday dawned sunny and calm, with the upper 40's temps from the night before quickly rising into the mid-60's by the time I rousted from my sleeping bag. After a late breakfast, I joined the other Kiski members and spent the day visiting with the group, discussing our previous night's observations and equipment issues, or attending some of the presentations, checking out the raffle and swap tables and inflatable planetarium, http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-13.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-14.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-15.jpg

or just walking around the observing field.

http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-16.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-17.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-18.jpg

During the afternoon, the temp rose into the unseasonable high 70's and we stuck to the shade. The sky was a very nice medium blue in color with plane contrails quickly evaporating as soon as they formed, which indicated low humidity. The prospects for the nights observing was looking very good!! Bob N had brought his portable generator, so we all charged up our field batteries for the night. At 5:30pm, we headed over to the lodge for the raffle drawing.

http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-19.jpg
There were about 75 attendees this year, so our chances of winning were good!
Bob K and I continued the Kiski tradition of winning door prizes, with Bob
bringing home a nifty Celestron Coffee travel mug and I winning a Celestron
50th anniversery pin and a green laser pointer with mounting bracket.
http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-20.jpg

During the raffle, the Richland club provided free pizza, as the scheduled food vendor wasn't able to make the event. It was after 6:30pm when the raffle ended, so we hurried back to camp to uncover our telescopes and prepare for the night. Seeing the observatory dome open, I grabbed my camera and ran over for a few pictures.

http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-21.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-22.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-23.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-24.jpg http://home.comcast.net/~kiskiastronomers/images/conventions/HH2010-25.jpg A number of visitors showed up for the night's star party at the observatory, so we had to be a little more attentive to our equipment than the night before. I had about a dozen folks stop by and ask about my StellaCam videoastronomy system. Later in the evening, several stopped back after dark to see how it worked, and were quite impressed.

Once it was dark enough, I decided to practice with the CG-5 mount, so I redid my alignment. Should have left well alone, as I ended up with a less accurate alignment than the night before.

As I had a lot of objects I wanted to observe and visitors dropping by, I decided that just having the object show up in the corner of the videomonitor but not dead centered was good enough of an alignment for the night. I got busy with surveying the deep-sky objects up in Cassiopeia, while waiting for Perseus to rise higher so that I could finish it from the night before. While the sky had looked great all afternoon, soon after sunset, a light scattered haze settled in, with an occasional thicker cloud band going over. What a disappointment!!

Still, I made the best of the conditions by sticking to the brighter galactic star clusters in Cassiopeia and Perseus, and going after some of the fainter nebula during moments of clearing. Denny, Dave, and the Bob's all ended up breaking down their equipment early. I persevered until a little after midnight, finishing up surveying the constellations Perseus and Cassiopeia. Perseus - Open Clusters: NGC1496, 1513, 1528, 1545, 1582, 1624. Nebulas: NGC1491, and 1579. In Cassiopeia - Galaxy NGC278, Nebulas: NGC281, 896, and IC289. Open Clusters: NGC103, 129, 133, 136, 189, 225, 381, 436, 457, 7788, 7789, and 7790.

I then packed up the cameras and was in bed by a little after 1:00am.

## Sunday 10/10/2010:

Woke up once again to mild conditions. The temp never dropped below the mid -50's from the night before. Bob K and Denny packed up and hit the road home before I made it out of my camper, soon followed by Bob N. Dave and I enjoyed our breakfast before finishing packing and leaving for home. Overall, while the observing was sub-par, we still had a great time getting together this year at the Hidden Hollow convention!

I'll have my video-observations of the various deep-sky objects that I imaged over the weekend online sometime later this fall. Please visit my Constellation Tour page at: http://home.comcast.net/~lsmch/constellationtour1.htm

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