

Black Forest Star Party 2010

At last the long hot days of summer began to finally draw to a close. Time to flip the wall calendar to the month of September and get ready for the Black Forest Star Party! With BFSP coming early this year, the week after Labor Day, several of us from the Kiski Astronomers decided to take advantage of the holiday and good projected weather forecast and head up to Cherry Springs sooner than we would normally do.

Sunday 9/5/2010:

Having packed the camper and car the day before, all I had to do before leaving on Sunday was to buy ice, so I slept in a bit. But, by 10:30am, I was on the road. The drive up was mostly uneventful, with only one small section of road close to the park having been recently oiled and chipped.

I just love driving thru that stuff! ;)

I arrived at Cherry Springs at 3:00 pm to find Bob K setting up camp in our usual spot, next to Bob N who had driven up the day before.

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-01.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-02.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-03.jpg>

There was already a large crowd on the observing field, over 100. Mike from NJ was setup across the gravel road from us, and Bob from the Hidden Hollow club was around the bend. Our other convention friends Dennis and Nick came later in the week. After spending a little time BS'ing, Bob and I got our camp straightened away and readied the telescopes and cameras for the evening.

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-04.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-05.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-06.jpg>

All day, the sky was a clear deep-blue, with a hint of cool air temperatures. It was going to be a really good night of observing!!

Once it dark enough for Polaris to appear, I quickly polar aligned, attached, and focused my three StellaCam video cameras: the EX with the Canon wide-field CCTV lens piggybacked on the 8" LX200GPS SCT, the SC-2 attached to the 80mm Bosma f6.3 refractor - also piggybacked on the 8", and my new SC-3 peltier cooled camera at prime focus of the 8" using a f6.3 focal reducer.

I spent the next hour or so doing first-light with the SC-3 on the showcase deep-sky objects over near Sagittarius - M16, M17, M20, M22, and the Ring nebulae - M57 up in Lyra. The results were very impressive!!!

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M16.jpg>

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M17.jpg>

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M20.jpg>

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M22.jpg>

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M57.jpg>

(all single 30 second shots)

Here's a nice comparison of the Sculptor Galaxy - NGC253, using the SC-2 in a 8 second exposure on the 80mm refractor and the SC-3 in a 45 second exposure on the 8" SCT:

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-NGC253-sc2.jpg>

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-NGC253-sc3.jpg>

From time to time, in between imaging, I would pause for a glance at the late summer Milky-Way, falling down into the south western horizon, the bright rift section overhead in the Summer Triangle, or in Perseus, now flying up over the north east to save the Princess Andromeda. The King of Planets - Jupiter was brilliantly holding court in the southeast sky.

It was all very beautiful!!

While the air temperature took a dive into the low forties, the dew never became an issue. For the most part, the telescopes stayed dry, with only the ground getting damp.

I then switched over to my constellation survey observing program and began imaging objects up in Cygnus. I spent the rest of the evening going from one star cluster or nebula to the next: NGC6819, 6826, 6834, 6871, 6874, 6883, 6894, 6896, 6910, 6960, and IC1320, 1311, & 4996. Cygnus, being in the Milky-Way, has a lot of open clusters!! Too many to finish in one night. Around 2:30 am, the drive up and long day finally wore me down, so I went to bed. Bob K called it a night about an hour earlier, but Bob N stayed up till dawn. Here's an image of NGC6883 - Crescent nebula at 45 seconds

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-NGC6888.jpg>

and NGC6960 - western portion of the Veil Nebula at 120 seconds:

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-NGC6960.jpg>

Monday 9/6/2010:

Monday dawned sunny, but a stiff breeze soon developed. Around 11:30 am Terry T and Dave K arrived and setup their camper across the road from us.

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-07.jpg>

Group photo time:

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-08.jpg>

That afternoon, while a few folks packed up and headed home for the end of the holiday, an equal number arrived and setup for the week. The five of us from Kiski spent the afternoon catching up and tweaking our telescopes.

Here's a picture of Bob K and Terry with their telescopes from later in the week:

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-10.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-11.jpg>

By sunset, a light haze had developed, but the wind finally died down. It was not going to be a great evening like Sunday, but a mediocre night of observing at Cherry Springs is way better than the best night back home in Pittsburgh!

As soon as it was dark enough, I resumed my survey of Cygnus. After a few hours, I finally wrapped up the constellation: NGC6996, 7039, 7047, 7050, 7062, 7086, 7093, 7128, 7175, and IC1369 and IC5146.

With the observing conditions having improved a bit, I spent some time having fun imaging the bright galaxies: the Whirlpool, M51, and the Pinwheel, M33, with the SC-3 and 8" SCT.

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M51.jpg>

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M33.jpg>

(Both single 60 second shots)

Throughout the night, waves of clearer skies would go over for a 15 - 20 minute period, followed a sudden onslaught of ever so slightly hazy conditions for a similar length of time. You could tell the onset when views of the Milky-Way seemed to go dull and flat. The dew was a little more noticeable, along with more flying insects which were non-existent the night before.

I then used the StellaCam-EX and Canon CCTV lens set to 5.5mm to take wide-field images of the constellations Capricornus, Triangulum, Cetus, and Aries. Using the SC-3, I went on to image all of the significant deep-sky objects in Capricornus and will add that constellation to my tour page later this fall. I wrapped up the evening by imaging the Double-Cluster in Perseus using both the SC-2 on the 80mm refractor and the SC-3 on the 8" SCT.

Crawled into bed around 3:30 am, Bob K was already down for the night, and Bob N soon to follow.

Tuesday 9/7/2010:

The early morning sun slowly gave way to a partly cloudy sky.

The air temperature jumped back up into the mid-80's, and was humid.

Bob N packed up in the morning and headed back to Pittsburgh and work.

Later that day, Eric L, along with his father John, both from the Leigh area, arrived and took the spot vacated by Bob N.

Here's a picture of Eric's scope, a nice 12" Meade LX200 on a GEM:

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-17.jpg>

Additionally, my friends from the Hamilton Ontario club (Don, John, Steve, and several others), arrived and setup camp near Terry and Dave. Here's a picture of Don P:

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-28.jpg>

Bob K pulled out his PST and we did a little solar observing with it.

There were several nice limb prominences visible, and one sunspot group.

After lunch, I drove down to Lyman Run Park, and spent a couple of hours on their hiking trails. It seemed like I was always going uphill ;)

During the day, the clouds kept building and by early evening we were mostly clouded out. After catching a few glimpses of Arcturus hovering in the western sky in a closing cloud gap, we all called it an early night.

Around 1:00 am, a gusty storm tore thru with lightening and high winds.

Terry and Dave woke up around 4:30 am to a temporary clearing, and were able to observe the Zodiacal Light rising up towards Gemini in the eastern sky.

Wednesday 9/8/2010:

By the time I woke, the clouds had moved back in, along with the winds. Additional rain held off, allowing the observing field to dry out. The temperature for the day hovered in the low 60's and dropped into the upper 50's by late afternoon. We visited a bit, but the conditions didn't make it very pleasant to be outside in the open. We all ended up spending time in our campers reading, watching movies, or planning the next observing session. Around 4:00 pm it began to drizzle, and kept that up thru out the early evening, developing into an occasional lite shower.

For a get-away back to civilization, Bob, Terry, Dave and I drove down to Sweden Valley for dinner at the Sweden Valley Inn. After the hot meal, and a few cold drinks, we headed back to camp, and everyone called it a night. I stayed up for a few hours reading in my camper. Much later that night, Bob K got up, noticed that it had stopped raining and went outside for a few minutes. Bob was pleasantly surprised by a small clearing that allowed the Milky-Way in the western sky to backlight thru a scattering of clouds lower to the horizon, illuminating their tops with silver starlight. Very cool!

Thursday 9/9/2010:

Thursday morning dawned partly sunny. For long stretches during the day, we had partly cloudy conditions with lots of Sun! Then a band of clouds would come flying in, throwing a few raindrops our way and chasing everyone under cover. But all during this, more and more people arrived to setup camp, and the observing field began to fill up.

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-15.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-16.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-27.jpg>

The weather forecast was calling for iffy conditions that evening, but Friday's forecast was looking excellent!! During the sunny stretches, a few folks brought out their solar telescopes, but there wasn't much to see as the one lone sunspot group had rotated off the western limb.

But the big story of the day was about last night's "visitor".

Around 2:00 am that morning, a bear 'visited' the southeast corner of the observing field and made off with a full ice chest! The owner, along with our friend Dennis, chased it away and retrieved the cooler, but not until the bear had rolled the cooler over to the tree line, popped it open and plundered the goods. While they were cleaning things up back at camp, the bear made another appearance, looking for 'seconds', and had to be chased off again. Here's a picture of the scene of the crime and the damaged cooler:

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-13.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-14.jpg>

During the late afternoon, a long lasting clearing went thru getting everyone's hope up for observing that evening. A number of folks, uncovered their telescopes. Unfortunately, the internet was impossible to get a connection to in order to verify the clearing, so we were all just overly optimistic as at sundown, the cloud cover moved back in, and there was no observing that night. Spent another evening reading and went to bed early.

Friday 9/10/2010:

Friday morning was a repeat of Thursday, dawning partly sunny with a slight breeze. The weather radio was calling for a sunny day and clear conditions overnight. (but Saturday evening - not so good). It looked like we were going to get one more night of observing in!!

After breakfast, we walked over to the vendors and dropped a few bucks on some items that we 'needed'. George K was there selling his observers guides, and I picked up his third handbook on the southern skies. After lunch, the clouds began building, so we couldn't do any solar observing. The internet continued to be on the fritz, so we couldn't check the weather satellite or radar. Bob K, Terry, and Dave all went down for a nap, but I stayed up to practice my presentation for tomorrow. The clouds began to thin out late in the afternoon. Attendees began to pour onto the observing field and soon almost all of the empty space was filled by campers. After dinner, we took a stroll around the observing field to check out all the telescopes that were now being uncovered in preparation for the evening.

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-18.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-19.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-20.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-21.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-22.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-23.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-24.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-25.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-26.jpg>

Once the sun got low, we hurried back and finished getting our own telescopes ready, and waited for darkness to fall. Around Sunset, a band of clouds drifted in, covering most of the sky and giving everyone heartburn. Then the unexpected happened!! The BFSP observing field was visited by an Unidentified Flying Object! I was able to capture a picture of the menacing craft hovering over Bob K's telescope before it suddenly disappeared:

<http://home.comcast.net/~kiskiastronomers/images/conventions/BF2010-UFO.jpg>

Of course it was actually a small tethered helium balloon carrying a video camera to record the observing field. ✍

By 9:00 pm it had completely cleared off to an extremely clear dark blue sky! We were in for a memorable Cherry Springs evening! It was still light over in the western sky, but the Milky-Way was glowing brightly overhead in Cygnus. Once fully dark, the Milky-Way over in Sagittarius with its bright starclouds and dark nebulae took on a 3-D effect. You could easily see stars down to the horizon, shining thru the gaps in the tree line.

A good number of the Messier Objects were naked eye.

Once Jupiter rose over the trees, it became a source of light pollution! We were even treated to a spectacular straight-overhead pass of the ISS. People with large binoculars were claiming to be able to see some details of the station as it went over at 90 degrees.

Like Sunday Night, there were no bugs to be bothered by, but with the air temperature plummeting into the upper 30's, the dew was going to be heavy.

I spent the first part of the evening going after a few deep-sky survey objects left over from my July trip in the constellations Delphinus, galaxies NGC6928 & 6944 and in Hercules - NGC6166 and 6207.

I then went back and re-imaged the Whirlpool, M51, and the Pinwheel, M33, the Eagle or Star Queen Nebula, M16, and the Dumbbell Nebula, M27 with the SC-3 and 8" SCT for 5 stacked images at 60 seconds each:

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M51b.jpg>

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M33b.jpg>

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M16b.jpg>

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M27.jpg>

Around midnight, I took a break and walked over to the food vendor for some hot chocolate.

Then I started back into my constellation survey in the winged horse Pegasus, where I spent the next three hours 'flying' thru the list of deep-sky objects located within it's boundaries: NGC7320, 7137, 7217, 7331, 7332, 7463, 7464.

While setting up for the next object to image high overhead in Pegasus, I noticed that the video image contrast had suddenly gone flat, but the sky overhead was still crystal clear. I checked the scope optics and realized what had happened. The dew was the most intense that I have ever seen at Cherry Springs. It covered everything! Even the hood on my sweatshirt was damp, and it had begun dripping from the inside of my tent canopy.

Early on, I had turned on my dew heaters to the low setting, but got busy with my observing program and forgot to crank it up when the dew really began to lay. As it was only going on 2:00 am I wasn't ready to quit for the night, so I had to find a way to clear the optics. I finally dragged out my camper's electric heater, plugged that in next to the telescope, and held it up to the dew covered optics. Within a few minutes everything was dew-free, and my heaters were now set to high. I was back in business!!

I then continued on in Pegasus with NGC7479, 7619, 7626, 7631, 7678, 7743, 7772, 7814, and finishing up with NGC23. Bob K called it an evening around 3:00 am, and Terry and Dave were down prior to that. Before going to bed, Bob had taken a walk around the field looking for some of the big Dob's we had seen before sunset, all but one were covered up for the night, having succumbed to the heavy dew earlier that evening.

The one remaining Dob, a 32" f3.6 was on Jupiter, of all objects!!

It was now close to 3:30 am, and I was now in a race with the Sun.

There were too many objects to observe and I was fast running out of time before first light began. I decided to spend a little time over in Orion using the SC-3 on the Great Orion Nebula - M42!

Here are 3 stacked images at 30 seconds each:

<http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-M42.jpg>

I also went after the Flame and Horsehead Nebula's, which turned out to be a bit harder to find and cost me more time than I had.

Finally, with the clock reading past 4:30 am, and a brightening glow in the east, I knew it was time to videocapture my last object - the Zodiacal Light. It was a prominent pyramid shaped code of light stretching up from the eastern horizon thru Gemini pointing in the direction of Taurus. Here's a single shot using my Samsung SDC-435 & 3.5mm CCTV lens on a tripod: <http://home.comcast.net/~lemastro/vidcap/images/BFSP2010-Zodicial.jpg>

What a great way to wrap up the evening!! I started packing away a few things and noticed that while I was working with the stand-a-lone Samsung camera, the 8" SCT and 80mm refractor had dewed over again! After consulting with Eric L, who was still up and had the same dew problem, we both decided to leave the scopes uncovered to dry off on the morning light, and I headed to bed! This past evening was one of the best observing sessions I've ever experienced, and made the several days spent in the rain worthwhile.

Saturday 9/11/2010:

Woke up from the campground noise after only about 4 hours of sleep. The sky at first was clear and sunny, but soon it went to hazy and partly cloudy. A front was approaching that would bring rain later that evening. After 'brunch', Bob and I visited the vendors again to buy a few more items. That afternoon, I gave my Solar Observing presentation to a packed audience, which included a few Kiski 'hecklers' near the front. (Thanks goes to Terry for telling me how to pronounce Anaxagoras). The handouts that I brought on identifying sunspot groups and prominences were snapped up like they were NASA photos. Here's links to a couple of the handouts that I prepared:

<http://home.comcast.net/~lsmch/Astronomical%20Objects.pdf>

<http://home.comcast.net/~lsmch/Solar%20Features.pdf>

<http://home.comcast.net/~lsmch/Lunar%20Features.pdf>

Everyone enjoyed the presentation, and afterwards a number of folks went back to my campsite for the observing session with the Daystar Filter, but the sky conditions had deteriorated into a thickening haze, which was disappointing.

Bob and I spent the remainder of the afternoon packing away most of our camping gear. Terry and Dave broke camp and readied their camper for the drive back to Pittsburgh after the raffle was over. Bob and I decided to spend the night at Cherry Springs and leave in the morning.

At 5:00 pm, Bob, Terry, Dave, and I headed over to hear the main speaker and to get good seats for the raffle drawing immediately following. The BFSP organizers had a number of good door prizes, including several small telescopes, a goto alt/az mount, and a Coronado PST. As Terry already mentioned in an email, the Kiski Club members cleaned up on the raffle.

Everyone, (except me), won a prize: Bob an eyepiece, Dave - binoculars, and Terry won a meteorite. It was kind of funny, as not only were we all sitting in the same row, but we were sitting in the order that the prizes were won - Bob, Dave, Terry, and then the only one who came up short.

A few rows in front of us there was a kid won two small telescopes sitting next to his brother who also won one of the other telescopes.

Needless to say, they were both two very happy kids!!

Once the raffle was over, we said our goodbyes to Terry and Dave, and they started the drive back to Pittsburgh. Bob and I went back to camp, where we finished putting away the last few camping items. With the sky fast clouding over, I reluctantly disassembled the 8" SCT telescope and mount. That's always the sad part of the end to a trip to Cherry Springs! We stayed up a little past dark, but called it an early night as we were both planning on getting up early. I finished up a chapter that I was reading in one of my books and went to bed.

Sunday 9/12/2010:

I woke up at 6:00 am to damp conditions, as it had rained overnight. Had to get back to Pittsburgh for a wedding that afternoon, so I was on the road by a quarter to seven, followed shortly afterwards by Bob K. (we met up again at the rest stop on I-80). The trip back was uneventful, with there not being much traffic that early in the morning till I got closer to Pittsburgh.

Thus ended another Black Forest Star Party. While I wish we could have had a few more clearer nights, the BFSP 2010 was still a great time, especially when you spend it with a great group of friends like the Kiski Astronomers!! I'll be looking forward to next year!

If you want to view any of the various deep-sky objects that I imaged over the past week, please visit my Constellation Tour page:

<http://home.comcast.net/~lsmch/constellationtour1.htm>

(but give me a few weeks to get them all processed!!!!)

Larry McHenry

Astronomical Webportal:

<http://home.comcast.net/~lsmch/>