December 3, 2004

Arrived at Pawnee Grasslands about 4:15 PM. The sun was setting and the temperature was about 22 degrees. There was about an inch of snow blanketing the entire area. The sky is clear and a light breeze from the NW.

As the night progressed, the win shifted from the N. The temperature hovered around 16 degrees and by the time we left at 10:30 PM, it was about 14 degrees.

I took my 8 inch scope there and spent much time looking through Bill Possel's 20 inch f/4.3 Star Master telescope.

NGC 6543	6:24 PM	In my scope, small, round, definitely a blue-green color. The central stars was sometimes seen. Thru Bill's scope, it was much larger, round and the central star was easily seen all the time. The star was centered in the middle of the nebula.
NGC 246	6:35 PM	A very faint planetary nebula that is more pronounced in a circle at the edges and some mottling can be seen over the interior of the PN. There are 4 field stars inbedded in the nebulosity.
NGC 772	6:45 PM	A pair of galaxies. 772 is the upper one. Very easy to see. Has a bit larger nucleus that is bright and surrounded by a faint, little bit of halo. The companion is below 772, much smaller, at least by a quarter of the size, but the nucleus is a tiny smudge of light surrounded by a very small and faint halo.
NGC 7492	7:07 PM	Very dim, diffused globular cluster. Most of what can be see is just a glow but sometimes the sky settled down and could see some 5-10 members stars on the glow. It was a fairly large circular glow. Class 12.
NGC 7314	7:20 PM	A dim, uniformly lit, boxy galaxy that is fairly large in angular displacement.
NGC 7674 NGC 7675	7:27 PM	Hickson 96 Group. 3 galaxies in the FOV, 2 very close together. The close pair can see a nucleus glow in both. They are VERY close together. The lower left galaxy is larger than the upper right (7675). A small amount of halo surrounds both of them. Then up above is a galaxy with a small, dim nucleus glow with a tiny bit of halo around this one also. All the nucleuses were almost starlike, tiny points of glow.

7675

M+I-59-81

7674

The sky is very soft and can only see 4 of the 6 stars in the Orion Nebula trapezium. There are clouds surrounding us on the horizon, 360 degrees and extends up about 30 degrees.

For most of the previous observations, using Bill's scope at about 250x.

NGC 1535 7:36 PM A large, round, uniformly lit, yet easy to see PN. Blue-green in color. No central star seen.

NGC 246 7:41 PM Look at this PN again. Very faint. The nebulosity is darkest in the ring that surrounds an invisible central star. The lower left part is the brightest. Can make out mottling in the central part.

NGC 247 A unit lit, cigar shaped galaxy right near 246. It was fairly large with no other details seen.

NGC 253 7:48 PM A large, cigar shaped galaxy that fills 1 ½ FOVs. Easy to see. The central part can see mottling from dust that blocks the light of the brightest part of the nucleus. There are 4 field stars on the nucleus. The arms (halo) extend left and right and dim evenly to nothing. Very nice.

NGC 288 7:54 PM A globular cluster that is large and diffused. Its round but no nucleus concentration or glow. Many member stars easily seen. Its uniformly lit. Class 11.

At 8:45 PM, found the comet Macholz C/2004 Q2, low in the south, just to the west of the constellation Lepus. I watched it over the next hour move to the west. It was making a nice equilateral triangle with 2 very faint field stars and then an hour later, it was a lopsided triangle to the left, and eventually would have made a right triangle with these two field stars.

NGC 7008 8:54 PM An irregular shaped PN. The brightest part in on the lhs and far right side than in the middle, but you can see a nebula glow in the middle easily. 2 field stars are on the rhs and can see a central star, popping into view once in a while, above what I would have called the center of glow.

NGC 941 9:15 PM 3 galaxies in FOV. 941 is the lower of the 3. Its small, with a dim nucleus and a hint of a tiny halo surrounding it. Next above this is a tiny, linear smudge of light. Then above this at the edge of the FOV is a tiny, very faint fuzzy patch of light.

NGC 1041		Then to the left of these 3 galaxies is a very faint, uniformly lit, circular smudge of light that is 1041. Then below 941 is a brighter (than 1041) little sliver of light.

The temperature is 15 degrees and when the wind stopped, it dropped to 13 degrees.

NGC 6939 NGC 6946	9:18 PM	Small, circular OC with 20 or so stars seen. The stars were of 2-3 different magnitudes. Then to the left of this is a very dim, circular, uniformly lit smudge of light that is 6946.

Throughout the evening, I looked at M1, M36, M37, M38, M42, M35, M57 in both mine and Bill scope. Looked at Saturn when it was above the muck in the east. Could see it but Cassini's Division was not easily seen.

The comet was neat. Someone had a laptop and could tell us where it was. Bill Travis found it with his binoculars and I put the 8 inch on it right away.

There were 7 people in all braving the cold here at Pawnee tonight. Packed it up about 10 PM with the moon soon to rise.