Wednesday September 24, 2014

John Figorski and I went to the Soaring Eagle Ecological Center at Red Feather Lakes, CO. The entrance to the site is at the elementary school's driveway. This site is very nice.

Calm and clear at sunset. 52 degrees.

In deep twilight I heard a grunting from the tree line. I saw a large bull moose that walked about 50 yds away from us. In the binoculars, you could see he had huge antlers and a long beard under his mouth.

Seeing Good. Transparency OK.

Sh 2-84	8:34 PM	24mm – Under 3 faint stars is this extremely faint glow. Small. Seen only with deepsky filter (DSF). 15mm shows it is larger, under 5-6 stars, yet stars are not lightening it up. No halo glows around the stars. Again seen only with DSF.
Pal 10	8:47 PM	15mm – Under 5 dim stars that form a Y is this medium sized, extremely faint glow. Very subtle but there. My eye follows it when I move the FOV around. Nice.

Sky Good. Transparency OK. 44 degrees.

Stock 1	9:33 PM	32mm – 18-20 bright blue white stars fills FOV nicely. Loose yet roundish in shape.	
NGC 6688	10:15 PM	15mm – A small, round dim glow. Has larger, hare brighter core in center.	
Dew on thermometer. 43 degrees. Seeing and transparency OK.			
DIZ (4.17.1	10.25 DM		

PK 64+15.1	10:35 PM	15mm – Stellar. Nice, bright pale white star that responds to OIII nicely. No halo seen.
NGC 6745	10:43 PM	15mm – A very small, <u>very</u> faint thin lens shaped galaxy. Uniformly lit.

Sky and Transparency now Good. 41 degrees.

NGC 6695	10:52 PM	15mm – A small, extremely faint thin tapered tilted galaxy.
		Maybe hint of a hare brighter core.

NGC 6685	10:58 PM	15mm – A very small, <u>very</u> faint tilted oval. To right and near a dim field star. Has tiny star core seen once in a while.
PK 103+0.1	11:15 PM	15mm – I caught a glimpse once of a small, <u>very</u> faint, round glow with OIII filter. Never saw it again even though I was right on star field where it was.
NGC 7261	11:26 PM	15mm – In a star rich area. 8-10 brighter blue white stars form a long rectangular shape. Loose. Matches picture in Night Sky Observers Guide.
NGC 7281	11:33 PM	15mm – A lopsided tall triangle pointing to 7 o'clock of 15 stars with 3 brightest stars on top and 3 next brightest on right side and rest much dimmer.
NGC 7226	11:47 PM	15mm – 5-6 <u>very faint</u> stars, forming a chevron. Sit on top of this small, round <u>very</u> faint glow.
PK 107-2.1	12:02 AM	15mm – Without OIII, see a brighter white star. With OIII, see a small halo oval around a tiny, bright star in center. Nice.
B171	12:09 AM	15mm – A long, wide boot shaped area void of stars in a star rich area. Top of boot 2 FOVs long and toe of boot 1 FOV. Bounded by bright stars and just a few sprinkled on void.
UGC 11557	12:19 AM	15mm – A small, oval, <u>extremely faint glow</u> . While looking at it with AV, saw something in center of glow. Maybe core. Seemed longer and not stellar.
NGC 6951	12:36 AM	15mm – A larger, dim, tilted oval. Core area brighter and can see lots of mottling in this area. With AV, core has lots of detail.
PK 116+8.1	12:52 AM	15mm – A brighter white star. With OIII, looks like an out of focus star with tiny bit of halo around it that is not seen without OIII.

40 degrees. Seeing OK . Transparency OK. Sky Commander not working. Star hopped all night. Had a good time.

Saw a tumbling satellite in John's scope. The flashes were 5-10 seconds apart. One flash was a round glow, and next one was a long, tiny rectangular glow. Looking at it closer,

could see two tiny rectangles made the one larger one with nothing in between them. Could have been two solar panels with spacecraft in between that didn't reflect sunlight. Watched it flash across his FOV. Very cool.

Thursday September 25, 2014

Few thin clouds drifting in from west. See a bit of hazy clouds around them. Calm winds.

Sky Commander didn't work last tonight. I found out the next day that the telescope was not level so when I tried to find M27 after aligning on Altair, it was off in Azimuth a couple of degrees and more off when tried to slew to M13. Being level made it work tonight. I also need to verify that I hit enter for a reference star, that the star is in the FOV afterwards and I didn't move the scope before hitting enter.

Sunset 6:40 PM. 61 degrees. Thin clouds forming in south and east and heading east. This was predicted by National Weather Service.

Sky Good. Transparency Good. Clear. No wind. 48 degrees.

Czernick 40	8:05 PM	15mm – 8 fainter stars of 3 magnitudes form a triangle with some of the stars inside triangle.
Roslund 4 IC 4954-55	8:15 PM	19mm – 15 stars form a line of stars that gets fatter in middle and tapers around each end. Approx 3 magnitudes. Brightest dim. Then in middle see a glow. With DSF, see it extends from center to right. Open cluster goes from 2-8 o'clock. Nebula goes from 3-9 o'clock. Dim yet easy to see.
NGC 6842	8:21 PM	19mm – A small, very dim glow. With OIII, see it is nice and round. Very dim with central star popping in once in a while. <u>Extremely faint</u> central star.
NGC 6813 see	8:25 PM	19mm – A smaller, round glow. <u>Very</u> faint. Without OIII,
see		central star in center easily and hint of glow. With OIII, see glow easier but central star harder to see.
NGC 6815	8:29 PM	19mm – A small asterism of 5 brighter and 4 very faint stars all close together form a star pattern.
Sh 2-88	8:33 PM	19mm – Around a brighter field star is this nice, Lynd Brightness 3 halo glow. Then the star below it, dimmer, has a glow around it also. DSF doesn't show it better than without filter.
NGC 6888	8:35 PM	19mm – In John's scope are 5 dim stars forming a pentagon and with OIII, see a glow under them that forms a wreath. Nice.

Sh 2-90	8:37 PM	19mm – Under a brighter field star is a lopsided glow (Lynd Brightness 3) that goes up at 2 o'clock in FOV from it. With DSF, for ½ FOV, see subtle <u>extremely faint</u> (Lynd Brightness 6) glow under a dozen stars beyond lopsided glow and to this side.
РК 72-17.1	8:46 PM	19mm – Only seen with OIII. Panning around area, see an <u>extremely faint</u> , small, longer oval glow. It move with FOV and my eye is drawn to it. Almost not there.
NGC 7080	8:50 PM	19mm – A very small, round, <u>very</u> dim glow. To left of 3 <u>very</u> faint field stars that form a line. In center of glow is a tiny, brighter star core that pops in a lot. Nice.
NGC 6921	8:53 PM	19mm – A hint of a small, thin ghostly glow. Maybe saw it once. To lower left of a brighter field star.
NGC 6904	8:56 PM	19mm – A very dim set of 5 field stars that are close and form a dice 5 pattern.
NGC 6944	9:05 PM	19mm – A very small, <u>very</u> faint found glow. Has hare brighter star core. Hard to see because its near and to upper right of a brighter field star.
NGC 6944A	9:05 PM	19mm – To 8:30 o'clock of N6944 and near is this tiny, uniformly lit round smudge of light.
NGC 6930	9:10 PM	19mm – A very small edge on. Dim. See brighter, linear core along axis of galaxy. Sits just above a <u>very faint</u> field star that is centered on it and almost touching.
45 degrees. Se	eeing and trans	parency very good.
NGC 6954	9:15 PM	19mm – An <u>extremely faint</u> , small, oval ghostly glow seen with AV once in a while.
NGC 6972	9:18 PM	19mm – A very small tilted oval. Has brighter star core in center then a second, bit faint field star to left of core and on glow.
NGC 6950	9:20 PM	19mm – An asterism of a tight group of 4 faint stars.

NGC 7003 9:23 PM 19mm – A very small, round, <u>very faint</u>, uniformly lit glow. To upper right and near a very faint field star.

NGC 7015	9:27 PM	19mm – A small, uniformly lit oval glow. Has 2 <u>extremely</u> <u>faint</u> field stars on glow but not at center. No core seen.	
NGC 7040	9:29 PM	19mm – An <u>extremely faint</u> , oval small glow. Watched it and saw a star core pop in, in center of glow.	
IC 1375	9:33 PM	19mm – An <u>extremely faint</u> , oval, small, uniformly lit smudge of light.	
IC 1367	9:35 PM	19mm – An <u>extremely faint</u> , round, small, uniformly lit glow.	
NGC 7077	9:41 PM	19mm – Hard to see because to right of a field star. A very small, thin, uniformly lit oval, <u>very faint glow</u> . Has brighter field star on it which might be the core but as faint as this is, can't believe core this bright.	
NGC 6710	9:50 PM	19mm – A very small, very faint oval glow. Has tiny brighter star core in center.	
NGC 6671	9:52 PM	19mm – A very small, round, very faint glow. In between 2 field stars. Has a larger, hare brighter core area.	
NGC 6675	9:55PM	19mm – A very small, <u>extremely faint</u> , round, ghostly smudge of light.	
NGC 6792	10:00 PM	19mm – A medium sized, <u>very faint</u> tilted oval with larger, hare brighter core area.	
NGC 6703 NGC 6702	10:07 PM	19mm – A dim, round, small glow with brighter, tiny core. Then above and to left is N6702, a very small edge on, thin, with brighter core.	
44 degrees. Sky and Transparency very good. Finding 14 th magnitude galaxies with ease.			
NGC 7186	10:15 PM	19mm – Under 6 stars that form a tear drop is a hint of a glow. DSF shows no glow.	
NGC 7248	10:18 PM	19mm – A very small lens shaped, <u>very faint</u> glow. Has brighter tiny core in center.	
NGC 7197	10:21 PM	19mm – A small tilted oval. Has larger, brighter core that brightens to a small core. Halo <u>very faint</u> around this core.	
NGC 7231	10:24 PM	19mm – A small, round or fat oval, <u>extremely faint</u> , uniformly lit, smudge of light.	

NGC 7250	10:31 PM	19mm – A small, thin, very dim glow. Has hare brighter linear core. Just below and very near a dim field star.
NGC 7223	10:34 PM	19mm – An extremely faint, fat oval (or round), uniformly lit glow. To lower left of a faint field star.
NGC 7240 NGC 7242	10:42 PM	19mm – A small, round, uniformly lit, <u>very faint</u> glow. Then above and to left is N7240, a linear oval, <u>extremely</u> <u>faint</u> , uniformly lit glow. Both easy to see even though they are faint.
NGC 7265	10:45 PM	19mm – A very small, very faint oval glow with brighter, tiny core seen in center with AV.
IC 5217	10:53 PM	19mm – A very small, <u>very faint</u> glow around a dim star. Best seen without OIII yet OIII shows it OK.
IC 1442	10:56 PM	19mm – 15 stars. Faint. Forms 2 small circlets with 2 stars bridging in between circlets. 5 stars in top circlet.
NGC 7295	10:59 PM	19mm – 4 stars with brighter, yellow-orange star above them and to left.
NGC 7394	11:02 PM	19mm – 15 brighter blue white stars of same magnitude are grouped loosely, $\frac{1}{4} \times \frac{1}{2}$ FOV in size. To lower right of a bright field star.
NGC 7510	11:05 PM	19mm - 7 blue white brighter stars of same magnitude form a long, narrow rectangle.
Mrk 50	1:09 PM	19mm – 13 stars form 3 lines and whole is an arrow shape. 4 bright stars of same magnitude and rest much fainter of same magnitude.
Sh 2-157	11:13 PM	19mm – For 2-3 FOVs on a side, all the stars in FOV have a halo glow around them. Brighter star, bigger halo. Still very faint though. N7510 had a noticeable glow under it and this is on the north end of this area.

- NGC 7762 11:18 PM 19mm 15-20 faint and very faint stars in a loose, yet compact area. 2 arcs, knot in between and more to upper left.
- Pismis-Moreno 1 11:22 PM 19mm Fills FOV. 25 stars of 4 magnitudes. Brightest stars bright and dimmest extremely faint, form a hat with brim.
- PK 101-8.1 11:27 PM 19mm A small, <u>extremely faint</u>, oval, uniformly lit glow. Seen only with OIII and AV.
- IC 1454 11:31 PM 19mm Around a bright field star is a large, Lynd Brightness 3 halo glow. Then under a knot of 5 > shaped stars is a Lynd Brightness 6 glow to lower right of a bright field star. Then below, a couple of fainter field stars has a glow. Glows centered on stars in center of FOV and rest of stars in FOV have no glow around them.

42 degrees. Sky and Transparency very good.

NGC 1544 11:35 PM 19mm – A very small, round, very dim glow with tiny brighter core seen in center. To right and touching glow are 2 extremely faint field stars close together.

Went to south. Stars fat and no galaxies found.

<u>Great Night</u>! John and I found all kinds of cool, faint stuff. No moose tonight. One, nice, long meteor in NW left a 5 sec smoke trail.

No dew tonight.

Had to go to work tomorrow afternoon, so I called it quits earlier than later.