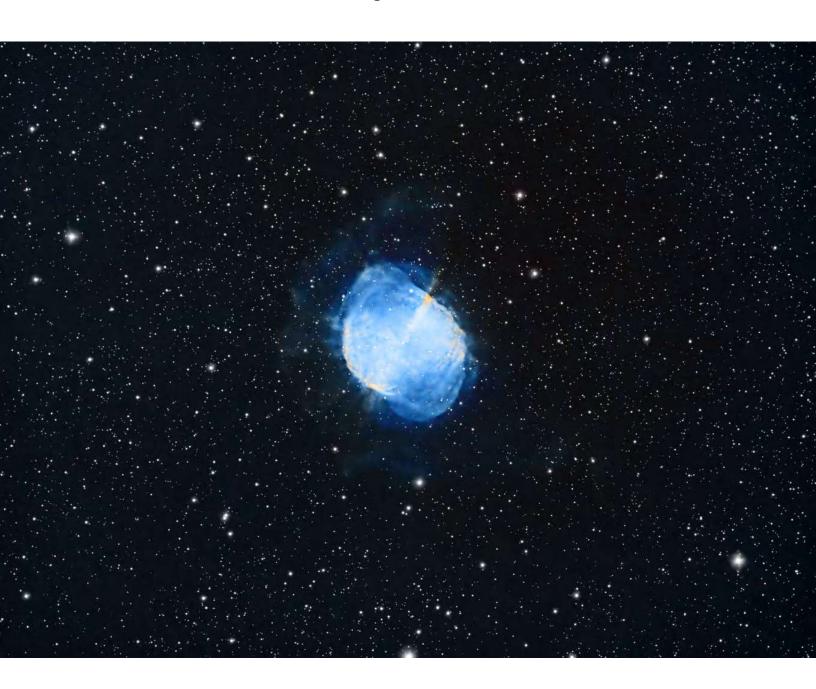
The Objective Lens

University Lowbrow Astronomers Monthly Newsletter Supplement

December 2023

Mostly Messier



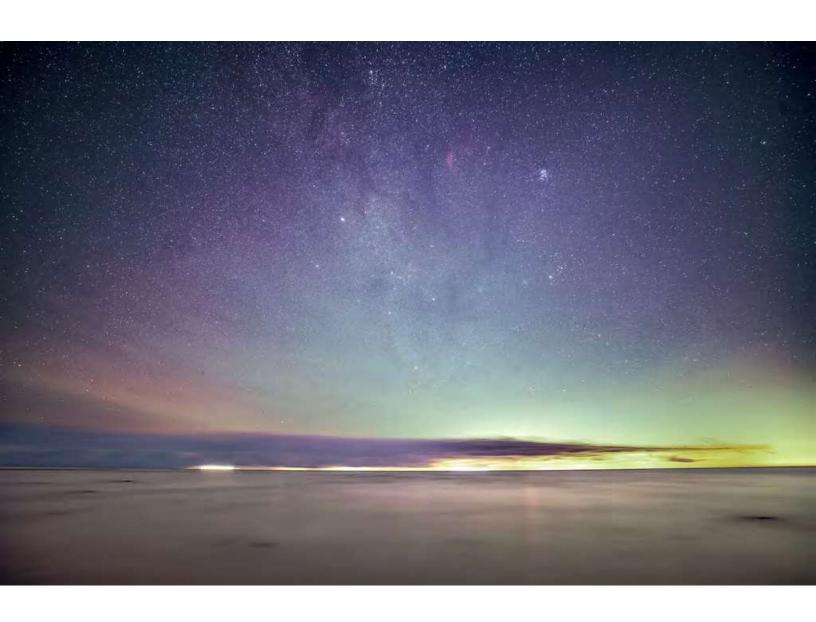
From **GLENN KAATZ**. M27. M27 is a planetary nebula in the constellation Vulpecula, lying about 1360 light-years away.

Celestron Edge HD 8 inch SCT, Celestron Off-axis guider, Celestron 0.7X focal reducer, Celestron CGX mount, ASIAir Plus, ASI1600MM Pro camera, ASI174 mini guide camer, ZWO Electronic automatic focuser, ZWO 8 position Electronic filter wheel, Astrodon 5 nm, Ha, ZWO 7 nm OIII and SII filters, QHY Polemaster for accurate polar alignment

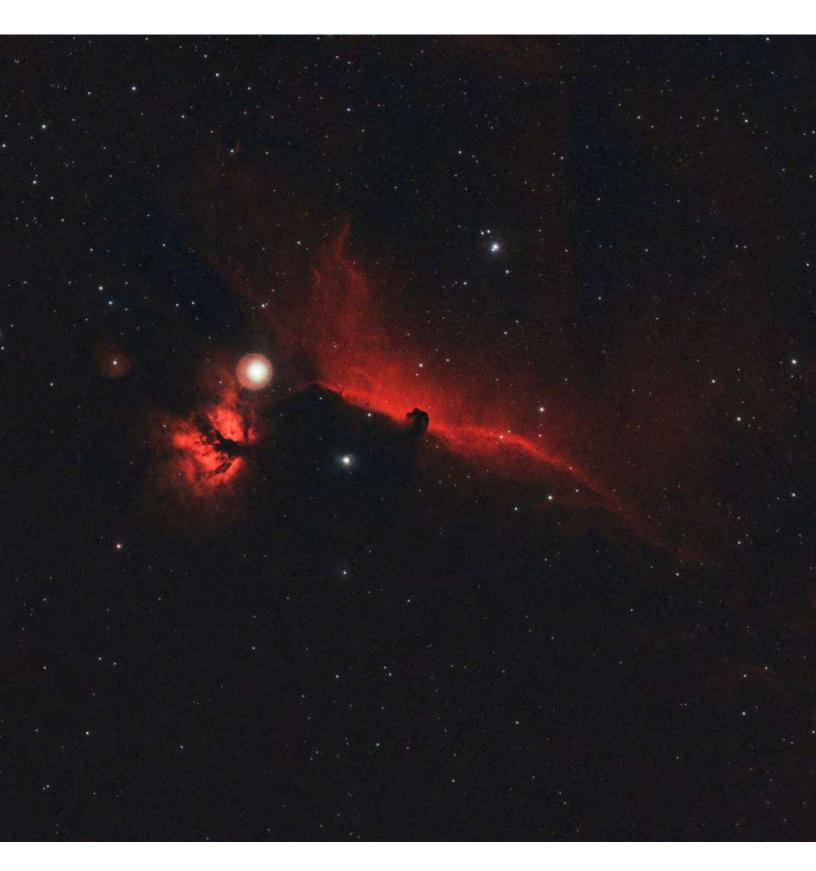
24 5 min subs of each filter for a total of 6 hours integration time



From **GARY NICHOLS.** M42..



From **ADRIAN BRADLEY.** M45, NGC1499 and other. Over Lake Huron, in Port Sanilac, MI.



From **GARY NICHOLS**. Horsehead and Flame Nebulas.



From **GLENN KAATZ**. M74 is a large <u>spiral</u> galaxy in the constellation Pisces. It lies about 32 million light years from Earth and contains two clearly defined spiral arms and is therefore considered to be an typical example of a grand design spiral galaxy.

Celestron EdgeHD 8 inch
Celestron 0.7X focal reducer
Celestron off-axis guider with ASI174 mini guide camera
Celestron CGX mount
ASIAIR Plus
ASI1600MM Pro main camera
Astrodon Halpha, Optolong LPro, ZWO RGB filters

LPro: 42x300 sec RGB: 24x300 sec Ha: 24x300 sec

Total integration time: 11.5 hours



From **KENNETH RUBLE**. M16. Eagle Nebula. Taken with 6-inch Ritchey-Chretien, Canon 40D, CG-5 Mount. (3 Minute) 10 light subs, 5 Dark Subs. Processed with Image Plus and DeNoise.



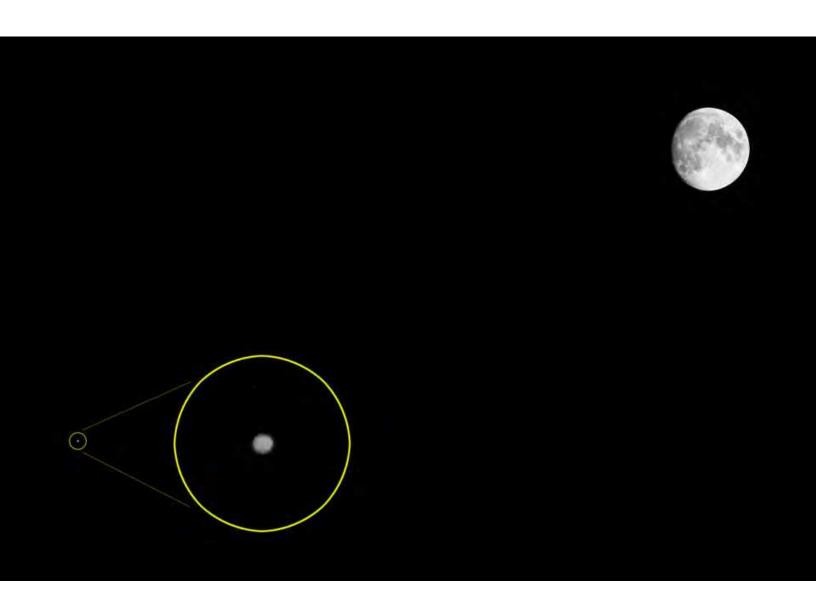
From **KENNETH RUBLE**. M42, Orion Nebula. Taken with 6-inch Ritchey-Chretien, Canon 40D, CG-5 Mount. (3 Minute) 4 light subs, 10 dark subs. Processed with Image Plus and DeNoise.



From **GARY NICHOLS**. M52 cluster and NGC 7635, Bubble Nebula.



From **BARRY CHAPMAN.** M33.

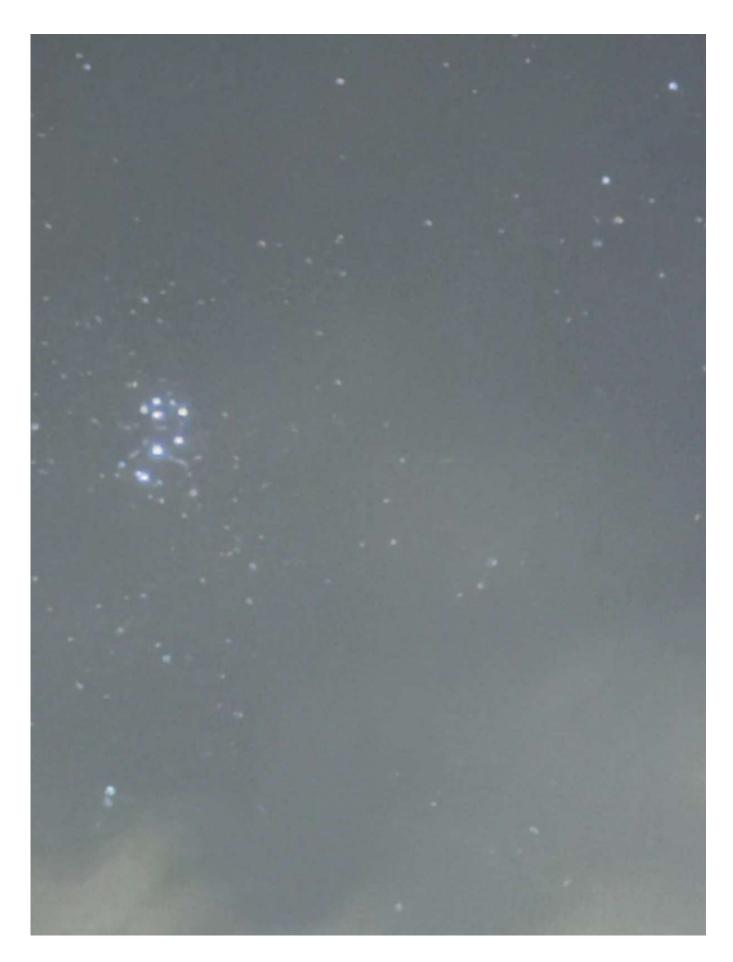


From **DOUG SCOBEL.** On the evening of November 24, I noticed that the sky was quite clear. A quick look out on my front porch found a waxing gibbous moon prominently high in the south-southeast, with Jupiter just a few degrees to the east. It was a very pretty sight. I wondered if both would fit in a single frame of my DSLR with my 400mm lens. Turns out they did fit, and I was able to fiddle with the exposure to get a decently exposed Jupiter without overexposing the moon. To my delight, when zooming in on Jupiter (see inset) one can clearly see its oblong outline and even hints of its two equatorial belts. In a single, hand-held shot no less! Alas, none of Jupiter's moons though, LOL!

I used my Canon EOS 5D Mark IV DSLR, Canon EF100-400mm f/4.5-5.6L IS II USM lens set to 400mm. 1/250 second f/8 ISO 400. Minor contrast tuning in Photoshop Elements 2020. I took the shot at roughly 10:15 PM EST. Jupiter and the moon were separated around 4.3 degrees.



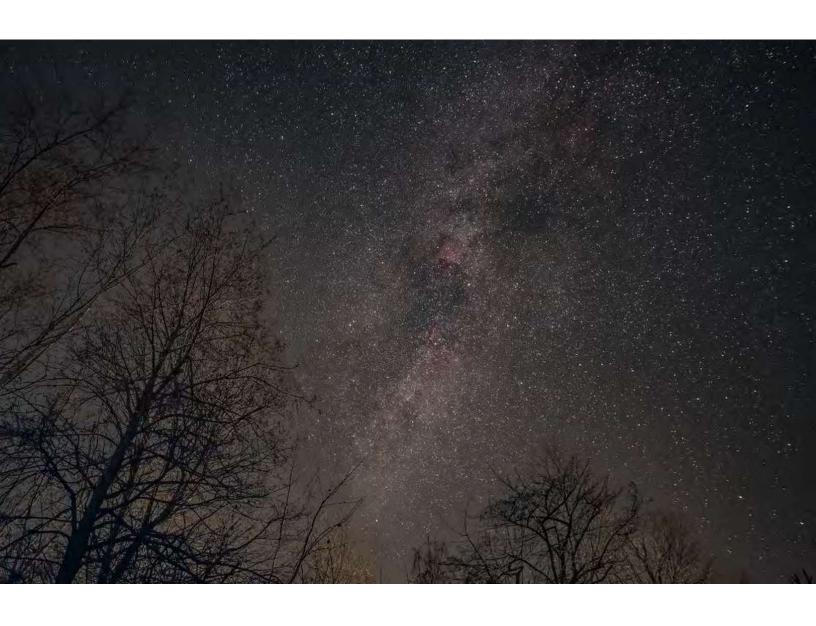
From **MATTHEW WEST.** M45.



From **MATTHEW WEST.** M45.



From **BARRY CHAPMAN.** M45, the Pleiades Star Cluster



From **ADRIAN BRADLEY**.



From **GARY NICHOLS.** NGC2244, Rosette Nebula.



From **DORIAN JURGLE**. Sunspots and Moon shots from the new Seestar.





From **AMY CANTU**. The Double Cluster (above) and the Owl Cluster, right.

