

Astronomy Club of Asheville

July 2025 Highlight

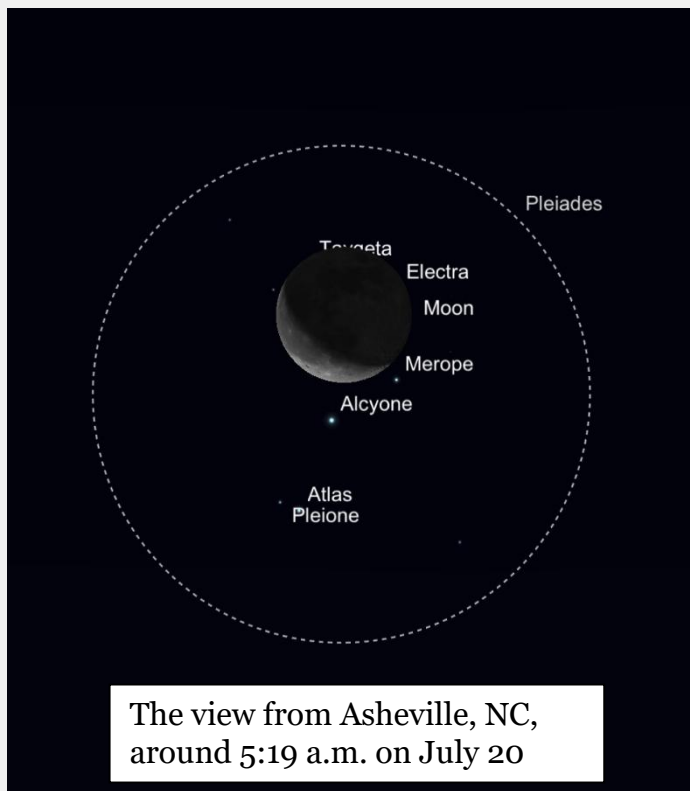
Lunar Occultation of the Pleiades at Dawn

At dawn on July 20th, a waning crescent Moon will pass through the Pleiades star cluster – occulting many of its brighter stars.

Here in the Asheville area, this occultation will occur relatively high off the eastern horizon in the constellation Taurus – the Bull. The 24% illuminated crescent Moon will hide many of the stars in the cluster, with maximum occultation occurring around 5:19 a.m. Sunrise occurs 70 minutes later – around 6:29 a.m.

The Moon orbits eastward, about 13° along the “ecliptic” (the path across the sky that the Sun, Moon, and the planets appear to follow), from one day to the next, or $1/2^\circ$ per hour. Because the Pleiades is located along that ecliptic path, it is often involved with lunar conjunctions and/or occultations.

The Pleiades star cluster – aka the “Seven Sisters” – is located some 440 light years behind the Moon.



This wonderful occultation is best observed using binoculars or a small telescope. Enjoy the view!