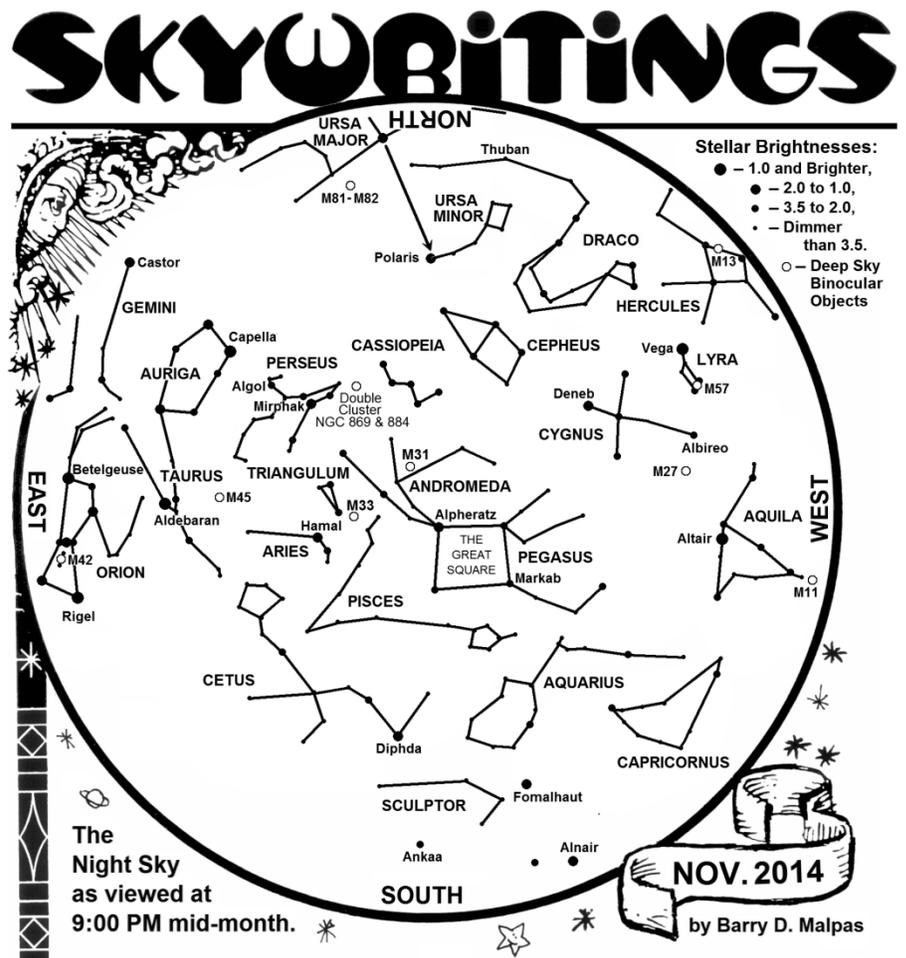


## Just what are those Sky Chart "M" and "NGC" Numbers?

By Barry D. Malpas – Special to the Williams-Grand Canyon News – 2014 November

One of the pastimes for some early sky observers was to locate new comets. Charles Messier (1730-1817) was a French comet hunter during the late 1700s, and discovered 13 new comets between 1760 and 1785. His interest in astronomy, and comets in particular, was influenced by seeing the great comet of 1744, and the comet of 1759 (of which Edmond Halley had believed the comets of 1531, 1607, and 1682 were the same and had predicted the comet's 1759 apparition which is now known as Halley's Comet.)

At this time telescopes were relatively small. The understanding of supernovae, or galaxies, was not yet in the current knowledge, as such objects only appeared as blurry smudges that did not move across the sky. In order not to waste time and become frustrated with viewing fuzzy objects that resembled, but were not, comets, Messier compiled a list of 110 of these celestial blurs which we now refer to as Messier, or "M Objects."



The Messier Catalog has become a very popular list of "Deep Sky Objects" among amateur astronomers around the world because it consists of most of the galaxies, nebulae and star clusters easily observable with binoculars or small telescopes in the northern skies. Now, however, the objects in the list are the source of interest, as opposed to the reason the compilation was originally intended by Messier. At large astronomical get-togethers, known as "star parties", there is often a "Messier Marathon" competition to view the most Messier Objects during one observing night.

In the 1880s, the "New General Catalogue (NGC)" was a more comprehensive compilation of 7,840 deep sky objects, and, like the Messier List, includes galaxies, nebulae and star clusters. Although most of these objects are very faint and require larger telescopes, there are some bright ones that are interesting to modern observers that Messier did not list.

The twelve "M" and "NGC" objects shown on the November Sky Chart are:

- **M11 in Aquila** - A rich Open Cluster in binoculars ... even better in small telescopes.
- **M13 in Hercules** - The brightest globular cluster seen in the northern skies. Seen as a small ball of stars in binoculars and small telescopes.
- **M27 in Cygnus** - "The Dumbbell Nebula" is the brightest of the planetary nebulae and appears as a fuzzy oval in binoculars and small telescopes.

- **M31 in Andromeda** - The most remote galaxy viewable with the naked eye in the northern hemisphere. Nicely viewed in binoculars. Two satellite galaxies seen in telescopes.
- **M33 in Triangulum** - A spiral galaxy faintly visible in binoculars ... better in a small telescope.
- **M42 in Orion** – “The Great Orion Nebula” is the most prominent emission nebula visible in the northern hemisphere ... a showpiece in binoculars and small telescopes.
- **M45 in Taurus** – “The Pleiades” (“Subaru” in Japanese – check the car logo) - The brightest Open Cluster of stars visible to the naked eye, but spectacular in binoculars.
- **M57 in Lyra** – “The Ring Nebula” - This planetary nebula (exploded star remnant) is visible in a small telescope as a small puff equidistant between the two brighter paired stars in Lyra.
- **M81 and M82 in Ursa Major** - The sky's brightest pair of galaxies seen as two smudges in binoculars or a small telescope.
- **NGC869 and NGC884 in Perseus** - "The Double Cluster" - Two open clusters of stars best viewed in binoculars.