

HORSEHEAD NEBULA

Originally, the word "nebula" referred to almost any extended astronomical object (other than planets and comets). The etymological root of "nebula" means "cloud". As is usual in astronomy, the old terminology survives in modern usage in sometimes confusing ways. We sometimes use the word "nebula" to refer to galaxies, various types of star clusters and various kinds of interstellar dust/gas clouds. More strictly speaking, the word "nebula" should be reserved for gas and dust clouds and not for groups of stars.

Nebulas are of different types, the horsehead nebula is a kind of [dark nebula](#).

DARK NEBULA: Dark nebulae are clouds of dust which are simply blocking the light from whatever is behind. They are physically very similar to reflection nebulae; they look different only because of the geometry of the light source, the cloud and the Earth. Dark nebulae are also often seen in conjunction with reflection and emission nebulae.

Horsehead Nebula

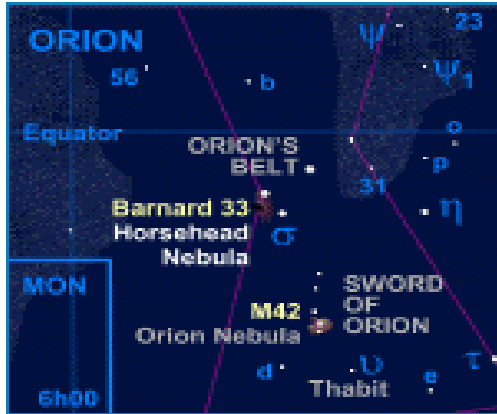
The **Horse Head Nebula** (also known as Barnard 33 in bright nebula IC 434) takes its name from the horse head shape in its middle. The first human to discover it was Williamina Fleming in 1888 at Harvard University. The horse head nebula is approximately 1500 light years away. It cannot be viewed by the unaided eye, or even with the use of a telescope. The only way to view this nebula is by taking long exposure photographs.

Even though it is nearly impossible to view the horse head nebula with the human eye (aided or unaided), it is one of the most popular astronomical

features in the sky. The horse head nebula, like a wild [stallion](#), represents beauty and freedom. Seeing the horse head nebula makes people feel connected with nature, much the same way as observing a wild stallion.



Embedded in the vast and complex Orion Nebula, it is seen in this representative-color image from the Canada-France-Hawaii Telescope in Hawaii. The dark molecular cloud, roughly 1,500 light years distant, is visible only because its obscuring dust is silhouetted against another, brighter nebula. The prominent horse head portion of the nebula is really just part of a larger cloud of dust which can be seen extending toward the bottom of the picture.



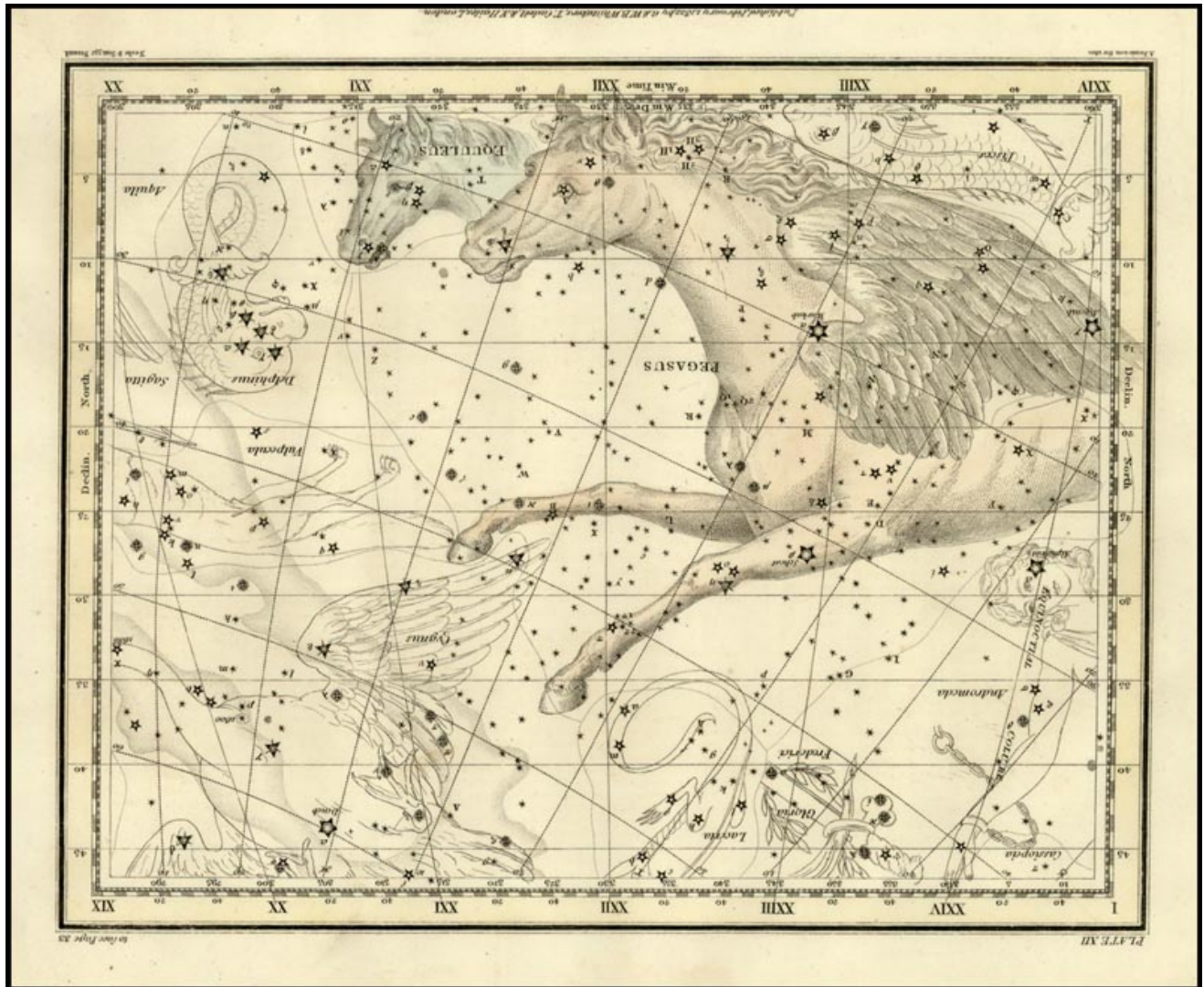
The famous dark Horsehead Nebula lies in the central regions of Orion. It is closely associated with Alnitak, the eastern star of Orion's Belt, and with nearby Sigma Orionis.

Ancient Mythology Related to Horsehead Nebula

Equuleus

Equuleus literally means "The Little Horse" in Latin. It is the second smallest of the 88 constellations. Equuleus earned its name due to its resemblance to a foal. In Greek mythology, Equuleus was once believed to represent Celeris, a relative of Pegasus. Celeris was either the brother, or the offspring of Pegasus. Other myths suggest that Equuleus was the horse who sprung from Neptune's trident when he and Athena were challenging one another for superiority. Because Equuleus rises before Pegasus, it is often called, Equus Primus, "The First Horse."

The stars of Equellus has three double stars that are suitable for viewing with a telescope. These are: Delta Equulei, Gamma Equulei , and Lambda Equulei (Dibon-Smith)



"Pegasus and Equuleus", Hand colored map created by Alexander Jamieson in 1822.

Pegasus

Pegasus is perhaps the most well known of all the Equine constellations. It is located in the northern hemisphere, and gets its name from the famous white winged horse of Greek Mythology. The Constellation Pegasus can be viewed from the northern hemisphere from late summer through autumn. In the southern hemisphere, however, Pegasus is best viewed during the early winter through the late spring.

In Greek mythology Pegasus is said to have been "born" from the blood of the Gorgon Medusa, when she was slayed by Perseus. Pegasus was then

tamed by the great warrior Bellerophon, who used a magic golden bridle given to him by the Goddess Athena to capture the white winged horse. Bellerophon used Pegasus to help him win many battles, and soon became arrogant. He was no longer happy being an honored warrior, and decided that he wanted to become a God. Bellerophon planned to use Pegasus to fly to Olympus where the Gods lived. However, when Zeus heard about this, he was not pleased at all. He sent a horse fly to bit Pegasus, which sent Bellerophon tumbling to the ground. Pegasus, however, was rewarded by Zeus for performing all of his duties. As a reward, *Zeus immortalized the horse in the sky, as the constellation Pegasus*