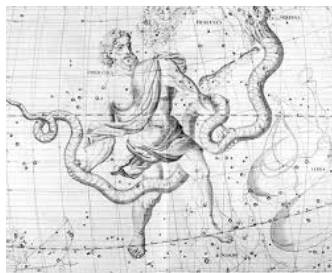


Zodiac constellations 17: Ophiuchus



The name Ophiuchus means 'the serpent holder or bearer' in Greek and represents a man holding a snake or serpent. The serpent is the constellation Serpens, which it divides into two parts. The man's head adjoins Hercules' head in to the north (in the northern hemisphere) while his feet rest on Scorpius to the south. From the southern hemisphere, the man is upside down, and his feet appear to be hanging down from the scorpion.

It is a large constellation, ranked 11th largest of the 88 constellations. It straddles the ecliptic and is thus, a zodiac constellation. However, it was the constellation sacrificed for the comfort of being able to divide the ecliptic into 12 equal parts.



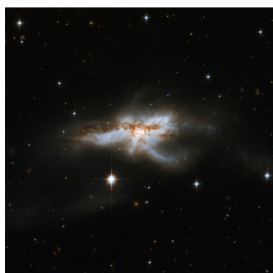
Although one of Ptolemy's 48 constellations, there is no evidence that Ophiuchus was a constellation before classical times. In Greek mythology, it was seen as the god Apollo, struggling with the huge snake which guarded the Oracle of Delphi. Roman mythology identified it with Asclepius, the god of medicine, who had power to revive the dead. Hades, god of the Underworld feared that this ability endangered his trade in the souls of the dead.

He asked Zeus to strike Asclepius down with a thunderbolt. Instead, Zeus placed Asclepius among the stars, where he holds a snake, the symbol of healing.

The Sun passes through Ophiuchus during the first half of December. It is located opposite Orion along the celestial equator. Because of its proximity to the Milky Way, it contains many deep sky objects, mostly globular clusters, but also several nebulae. The seven Messier objects in Ophiuchus are all globular clusters.

Notable features include:

- Alpha Ophiuchi (Rasalhague - 'head of the serpent charmer'); the brightest star in the constellation is 49 ly away.
- Rho Ophiuchi: an impressive multiple star; a central star with another on each side plus a fourth. Binoculars identify the larger stars, but a telescope is needed to observe the fourth one.
- Rho Ophiuchi Nebula: a faint nebula surrounding Rho Ophiuchi.
- M10 and M12: both globular cluster. Visible through binoculars, they are visually the best of the seven globular clusters catalogued by Messier in Ophiuchus.
- Other globular clusters: M9, M14, M19, M62, M107
- NGC 6633: an open cluster visible through binoculars.



- NGC 6240 (Butterfly Galaxy): an unusual galaxy merger remnant and starburst galaxy 400 million ly away. It has two supermassive black holes 6,000 ly apart. Its presence was confirmed by the Chandra X-ray Observatory. The black holes are scheduled to merge in about 1 billion years. It has an unusually high rate of star formation, a consequence of the heat remaining from the galaxy merger process and the black holes. It is this feature which makes it

- a starburst galaxy.
- IC 4665: an open cluster visible through binoculars.
 - Barnard's star: the second closest star to Sun. It is 5.9 ly away and has a luminosity 2,000 times less than the Sun. Discovered in 1916 by the American astronomer E E Barnard, it has the largest proper motion of any known star.
 - Ophiucids meteor showers: the weak, ill-defined activity occurs during May and June. It is not recognised by some as a discrete shower, but as possibly due to general activity from the antihelion radiant.

Sources: Ridpath, I (Ed) 2012 Oxford dictionary of astronomy Oxford, OUP, Ridpath, I (Ed) 2006 Astronomy London, Dorling Kindersley, en.wikipedia.org