

## Dance of the Constellations - Perseus the Hero

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For me, Greek mythology reads like a soap opera. In brief, Perseus was the son of Zeus and Danae. However, Perseus's childhood was fraught with people to do away with him. His grandfather King Acrisius, the father of Danae, was told by a cleric that Perseus would one day kill him. Out of self-preservation, he casts Perseus and Danae out to sea in a wooden chest. Instead of drowning, they washed ashore and were rescued. King Polydectes falls in love with Danae but wished Perseus dead, so he asks for Medusa's head as a wedding gift. Perseus takes on the challenge and beheads Medusa, spilling some of her blood into the sea causing it to foam violently. Neptune, the king of the sea, formed Pegasus, the flying horse, from the resulting foam for our hero to fly back home. On his way, Perseus sees Andromeda, daughter of Queen Cassiopeia and King Cephus. She was tied to a rock at the shores edge as punishment for being prettier than her mother. In immediate danger of being devoured by Cetus, the whale, Perseus swoops down showing Cetus Medusa's head and turns the sea monster to stone with a wink of her eye. Upon returning, Perseus turns King Polydectes to stone, weds Andromeda and claims the throne from his grandfather. As for the cleric prediction, King Acrisius is killed when walking into the path of a discus thrown by Perseus some years later. This story comes to life when told from the view of our G. *Arthur Cort Sky Theater.*

Today, as prize for his heroism, Perseus is found high in our night sky just after dusk this time of year. Look for Orion low in the east, using his lower right leg (the star Saiph) and upper left shoulder (the star Bellatrix). Saiph and Bellatrix are the less bright corner stars of Orion. Connect a straight line through them and continue that line through Taurus the Bull and just past the Pleiades but stop before you get to Cassiopeia. Nearly overhead, you should see about six stars in a gentle arc, the body of Perseus. The bright star in this arc is Mirphak. Perseus extends his arm from Mirphak towards the south to a slightly less bright star, Algol, the demon star. Algol represents that winking eye of Medusa's head held in his hand.

Noteworthy is the clock like behavior of Algol. Every 2.86 days it dims for a few hours (a stellar wink), from a -2 magnitude to a -3 magnitude. The cause is that Algol is not a single star, but a binary system comprised of two stars with their orbital plane in line with our view. As the two stars eclipse each other, its apparent brightness is reduced from 2<sup>nd</sup> magnitude to 3<sup>rd</sup> magnitude.

There are some nice objects easily viewable with the aid of regular binoculars, such as the M34, a star cluster comprised of about 80 stars. This grouping of stars is about 14 light-years diameter and some 1400 light years away. Their formation likely occurred 180million years ago, having formed about the time dinosaurs died off and birds began to take flight. Our earth is older than these stars.

On a very dark night you may be able to detect the fuzzy appearance of star clusters NGC869 and NGC884, known as the double cluster first recorded in 130 B.C. by Hippocras. With lower power magnification and light gathering capability of binoculars, you should see these fuzzy objects turn into numerous points of light. Stars in the double cluster are even younger than those of M34, about 3 million years old and 7000 light years away.

Other than star clusters, Perseus offers us a view of M76, the little dumbbell nebula. This planetary nebula is in fact a result of a star ejecting the vast majority of its atmosphere away from itself. The ejecting material forms a glowing halo of about 1 to 4 light-years across. Being one of the more faint objects in Perseus you will not see this through your binoculars. Instead, I invite you to visit the Cameron Park Rotary Club Community Observatory and make the request to view this object and others through one of our 14-inch telescopes. For information regarding location and visiting hours go to [www.communityobservatory.com](http://www.communityobservatory.com).