

Fall Library Telescope Astro Guide October-January

Get the most out of your time with your telescope by reading this page and using attached maps. Study the maps and start learning the star patterns before you go out after dark. This area of the sky is made up with the characters from the Greek legends the movie Clash of the Titans was made from. Look this up, all the characters will be in this area of the sky. Note on magnitude. Brightest stars we see are 1st magnitude. In a dark location on a moonless night we can see down to 6th magnitude. In town 3rd or 4th magnitude will be best you can see.

Fall Square – Use map provided to trace out

Start by finding the Fall Square or “Square of **Pegasus**”, the flying horse, low in the east when it gets dark around the 1st of October. It is a nice square made up of 2nd magnitude stars. Stretching out from one corner toward the north star will be **Andromeda**, the princess, toward **Perseus** the hero of our tale. Follow the eastern two stars of the square to the south and you’ll find **Diphda**, the only bright star in that area of the sky, in the head of **Cetus** the whale or Sea Monster. The western two stars of the square lead you to **Fomalhaut** in **Pisces Austrinus**, a 1st magnitude star low in the south.

Objects for Library Scope:

M31 the Great Andromeda Galaxy. 2 million light years away. Fine object in this size scope. Easy to find with Binoculars. Star hop to it from Alpha Andromeda in the Square of Pegasus.

γ Gamma Aries a nice double star

Double Cluster between Perseus and Cassiopeia. Wonderful pair of open clusters in a small scope

M15 Globular Cluster in Pegasus. Easy to find off of one of Pegasus’s legs.

M33 another close galaxy in Triangulum. Note how to find it using same star hopping stars as M31.

Demon Star Algol represents head of Medusa as slain by Perseus. An eclipsing variable every 3 days it dims from magnitude 2.1 to magnitude 3.4 for 11 hours.

Circumpolar (Northern Sky)

Cassiopeia the Queen Distinctive W or M shape in the Northeast. Cassiopeia is in the Milky way and through your scope will show many stars. Try for **M103 an open cluster**.

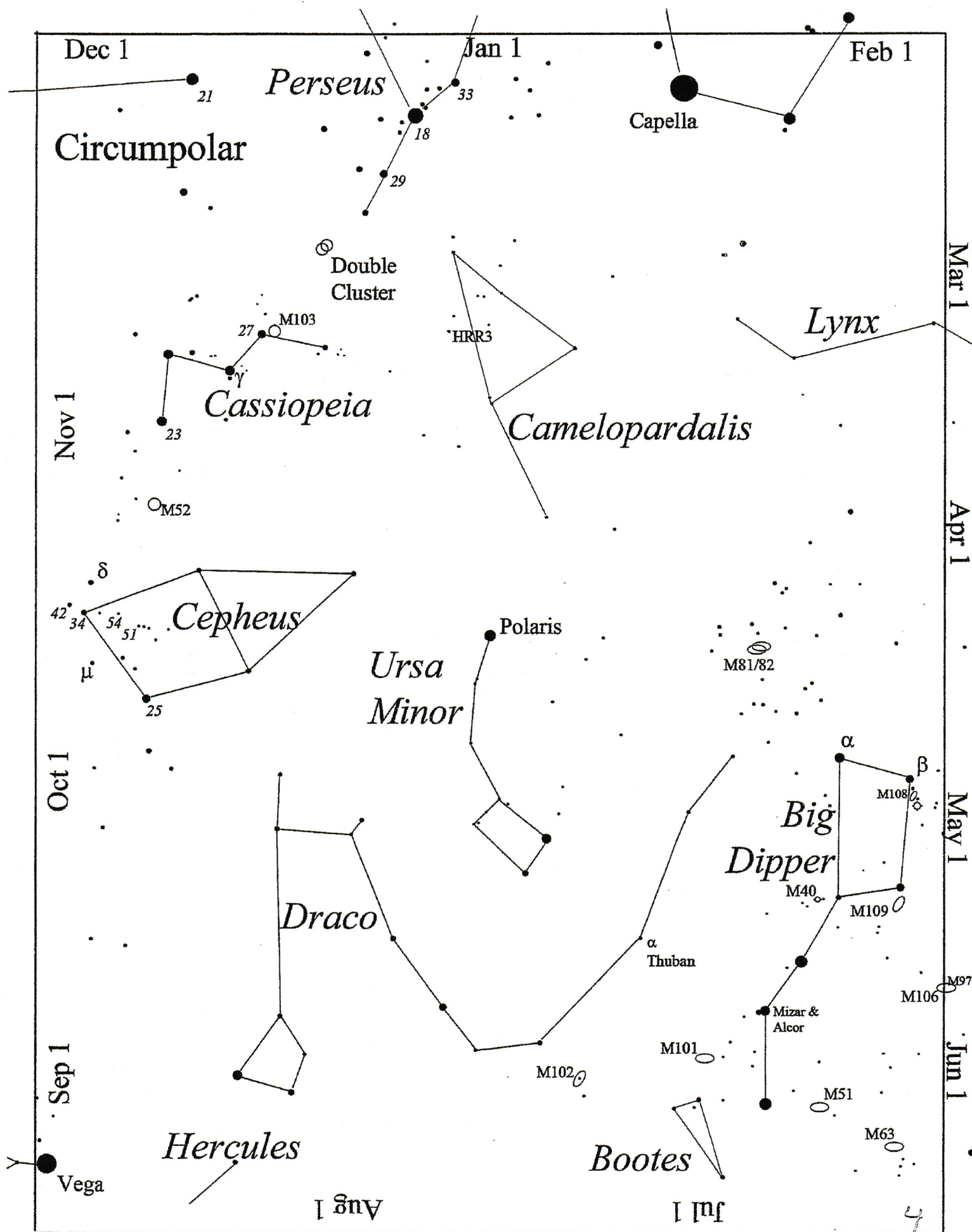
Cepheus the King Above Cassiopeia look for a nice house shape of 3rd magnitude stars. Of interest through your scope here is the Variable Star **μ Mu Cepheus** also know as Herschel’s Garnet Star.

Ursa Minor With the big dipper down you can locate Polaris using Cassiopeia. It is the brightest star under the M of Cassiopeia. Find north with a compass or your phone. Polaris should be star closest to north about 35 degrees above the horizon. It never moves from that spot with all other stars rotating around it. It is a difficult double in a small scope. In dark skies you can trace out all 7 stars of the little dipper.

Fall Check List	* telescope	M33 * Galaxy in Triangulum
Square of Pegasus		Diphda in Cetus
M15 *		Fomalhaut in Pisces Austrinus
Andromeda		Cassiopeia
M31 * Great Andromeda Galaxy		M103 * Open Cluster
Perseus		Cepheus
Double Cluster *		Mu Cepheus * Red Star
Algol		Polaris in Ursa Minor
Aries		
Gamma Aries* Double Star		

Attend star parties, lectures, join a club. www.caasastro.org

You can print off a complete sky guide and find a lot more information on the Library Telescope site at www.ltp.caasastro.org



Fall Square

