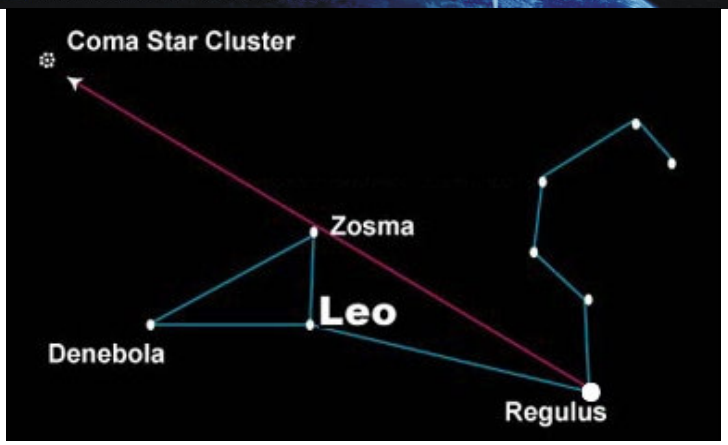
During this month our challenge is for you to make a picture of the Coma Star Cluster. The Coma Star Cluster in Coma Berenices, also designated Melotte 111, is a small but nearby *star cluster* in our galaxy, containing about 40 stars between magnitude 5 to 10 with a common proper motion. The open cluster is approximately 450 million years old.

The Coma star cluster used to be known to represent Leo's tufted tail, but Ptolemy III, in around 240 BC, renamed it for the Egyptian queen Berenice's sacrifice of her hair in a legend.

Melotte 111, taken from a rural location in England in March 2003.
Source: Wikipedia.
(Click on the image to see a bigger image)

To observe the Coma star cluster you must first look for the Constellation of Leo. There are wo distinctive star patterns make the Lion fairly easy to identify. Leo's brightest star – Regulus – dots a backward question mark of stars, and asterism known as *The Sickle*. If you could see a Lion in this pattern of stars, *The Sickle* would outline the Lion's mane.



Finding Melotte 111
Adapted from EarthSky.
(Click on the image to see a bigger image)

A triangle of stars highlights the Lion's tail and hindquarters. Denebola is an Arabic term meaning *the Lion's Tail*.

Now try to star-hop to the Coma star cluster. Draw a line from Regulus through the top star of the triangle (Zosma), and go about twice this distance to locate the cluster. This open cluster is at a distance of 288 light-years and covers an area of more than 5 degrees on the sky.

Although the Coma cluster is visible to the unaided eye in a dark country sky, you may need binoculars to see it if your skies are beset by light pollution.

Links:
Wikipedia - Coma Star Cluster
SEDS-Melotte 111
Earth Sky - Star-hop from Leo to the Coma Star Cluster