NGC 4889 (Caldwell 35) and NGC 4872 in the Coma Galaxy Cluster

11th magnitude NGC 4889 and NGC 4872 are two of the brightest objects in the Coma Galaxy Cluster (also known as Abell 1656). This is one of the richest galaxy clusters that can be observed with amateur telescopes (and the larger the telescope, the better). This group is roughly 250 million light years away, and it contains over 1000 galaxies. A few of the brightest can be seen with a medium-sized telescope, and many more can be seen with large scopes.



Start by finding the Spring Triangle, which consists of three widelyseparated first magnitude stars--Arcturus, Spica, and Regulus. The Spring Triangle is high in the southeast sky in early spring, and in the southwest sky by mid-Summer. (To get oriented, you can use the handle of the Big Dipper and "follow the arc to Arcturus").

For this star hop, begin from brilliant Arcturus (magnitude 0).

From Arcturus, look 5 degrees to the west to find 2nd magnitude Muphrid, then continue along this line twice that distance, and look for α (alpha) Coma Berenices. The three brightest stars of Coma Berenices (α , β , and γ) form a right angle. From α , look 10 degrees north for β , then take a right turn and go 2.5 degrees to reach the area of NGC 4889.



The chart belows shows the central portion of the Coma Galaxy Cluster. The chart is about 1 degree wide, so a low-power eyepiece could encompass this entire field. However, many of these galaxies are magnitude 13 or 14, and zooming in with a high power eyepiece through a large scope offers the best chance to see them.



Star hop from <u>www.skyledge.net</u> by Jim Mazur. Star charts created with Cartes du Ciel.