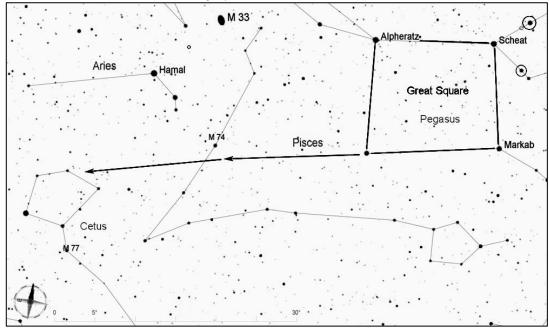
## Messier 77, Galaxy in Cetus

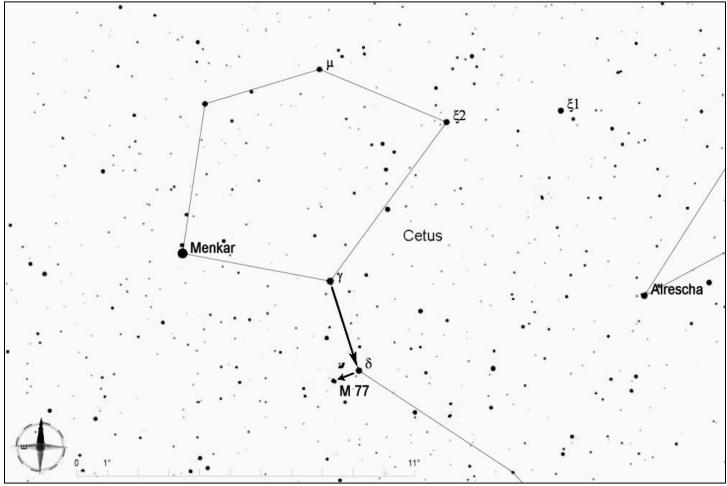
Messier 77, also known as Cetus A, is an example of a Seyfert galaxy--a galaxy with a bright and active nucleus that is a strong emitter of radio waves. This bright nucleus is quite noticeable through a telescope. With a large telescope, quite a bit of structure can be seen in this face-on galaxy. The distance to M77 is about 47 million light years.



Start by finding the Great Square of Pegasus, which rises in the eastern sky during the early fall evenings, is high overhead later in the fall, and sinks in the western sky during early winter. To be sure you know how the square is oriented in the sky, look for the two stars outside the northwest corner of the square (circled in the chart below) that form a small triangle with Scheat.

Using the southern edge of the Great Square as a pointer, extend a line to the east about twice the size of the Square, and you will arrive at a circle of dim stars that represent the head of Cetus, the whale.

From the head of Cetus, move south about 3 degrees to the 4th magnitude star delta ( $\delta$ ) Ceti. With  $\delta$  centered in a low-power eyepiece, move 3/4 degree to the east to reach M77. It is bright enough to be seen well in even a small telescope.



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