

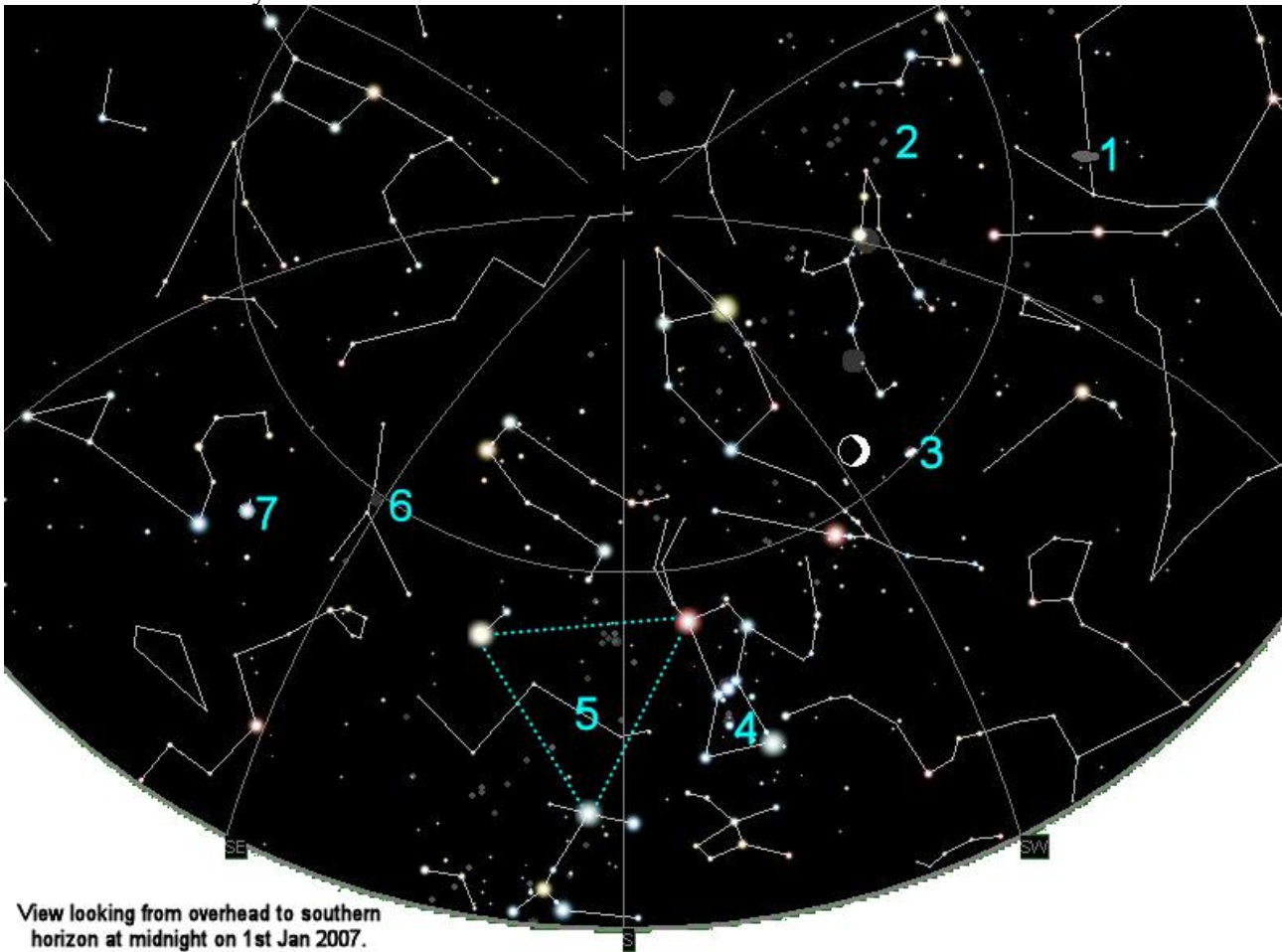
Caithness Winter Night Skies

(Selected Winter Highlights - January 2007)

Got a Telescope/ Binoculars as a present for Christmas? Want to know what interesting objects there are in the night sky to look at? Well, except for the weather, you couldn't pick a better time of year to look skyward as the winter sky has an abundance of easily located interesting objects to view. Below are details of some of the highlights to get you started.

All these objects listed in this short guide are visible to the naked eye on clear, cloud free and moonless nights although some may only appear as small fuzzy patches that are a little brighter than the dark winter sky. Binoculars and small telescopes will show much more detail enabling views that never fail to impress those new to stargazing (see table below).





During winter months the prominent constellation of [Orion](#) dominates the sky above the southern horizon. Once this is found it should be possible to navigate to the other areas of interest using a star chart like the one below. Note that as the hours pass the stars to the south will slowly move in an arc across the sky from east to west.

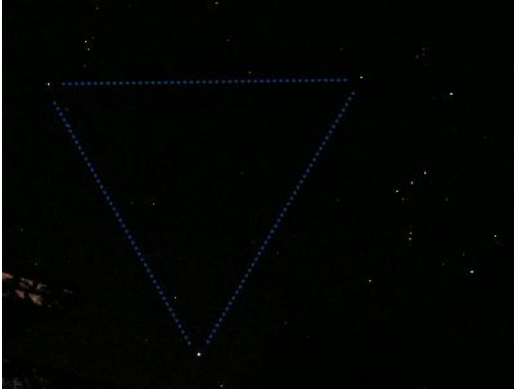




One other obvious object not listed above that is never hard to identify and well worth a look with binoculars or telescope is the [Moon](#). You'll be surprised how much detail can be seen. Note that you should **never** look at the [Sun](#) with binoculars or a telescope without special filters, as this will almost certainly lead to damage to the eyes.

G Mackie, January 1st 2007

Selected Winter Sky Highlights

<i>No</i>	<i>Name</i>	<i>Info</i>	<i>View Through a Small Telescope*</i>
1	<u>Andromeda Galaxy (M31)</u>	<p>This galaxy is the farthest away object visible to the naked eye. It lies 2.5 million light years away from us (ie so far away that it has taken 2.5 million years for light from it to travel to us).</p> <p>It is easily visible in binoculars or a small telescope, but unfortunately does not show much detail.</p>	
2	<u>Double Cluster (NGC869 & NGC884)</u>	<p>Visible to the naked eye as a fuzzy patch of sky between the constellations of Perseus and Cassiopeia, this is one of the showpieces in the night sky. It truly is a beautiful sight through binoculars or a small telescope.</p> <p>These two clusters lie about 7,000 light years away within our galaxy (the Milky Way). The stars are present in a variety of colours which adds to its appeal.</p>	
3	<u>The Pleiades (M45)</u>	<p>This star cluster is easily visible to the naked eye and is a stunning sight in binoculars or a small telescope.</p> <p>This is a relatively young group of hot stars and as a result they are bluish-white in colour.</p>	
4	<u>The Orion Nebula (M42)</u>	<p>This is the brightest and easiest nebula to observe from Caithness and is to be found in the prominent constellation of Orion. Below the 3 bright stars that make up The Great Hunter Orion's belt, the naked eye will see three bright patches that make up his sword. The Orion Nebula is the centre of these bright areas. Binoculars show some structure, but even small telescopes will bring out a wealth of <u>detail</u> on crisp clear winter nights.</p>	

<i>No</i>	<i>Name</i>	<i>Info</i>	<i>View Through a Small Telescope*</i>
5	The Winter Triangle	This triangle is made up of the bright stars Betelgeuse (right), Procyon (left) and Sirius (bottom). The last of these being the brightest star visible in the entire sky. The Milky Way passes through this area and as a result it contains numerous stars - a sweep of it and the neighbouring constellation of Orion with binoculars will therefore not disappoint.	 <p>(*Naked eye view)</p>
6	The Beehive Cluster (M44)	This open star cluster is visible to the naked eye as a fuzzy patch of sky in the indistinct constellation of Cancer. Due to the large area of sky it covers (several times the diameter of the Full Moon) it is perhaps best viewed in binoculars as it is difficult to fit it all into the view through a small telescope.	
7	Saturn	The view of Saturn's rings through a telescope is generally regarded as a sight that once seen will never be forgotten. Unfortunately binoculars are unlikely to show the rings around Saturn, but they will enable its brightest moon, Titan to be observed as a nearby star-like point of light. A small telescope will show Saturn's ring system and several more of its moons. During the first half of 2007, Saturn will be able to be observed close by the bright star Regulus in the constellation of Leo.	

* for all but items 5 & 7, what you see in the photos is **roughly** what you can expect to see through a small telescope at relatively low magnification (25-50x magnification). Binoculars will give a similar view, but a bit things will appear smaller and more compact.

Item 5 is the view with the naked eye and item 7 is a higher magnification (~100x) view through a small telescope.

Blue underlined text in the above guide contains hyperlinks to related web pages that you might find of interest.