

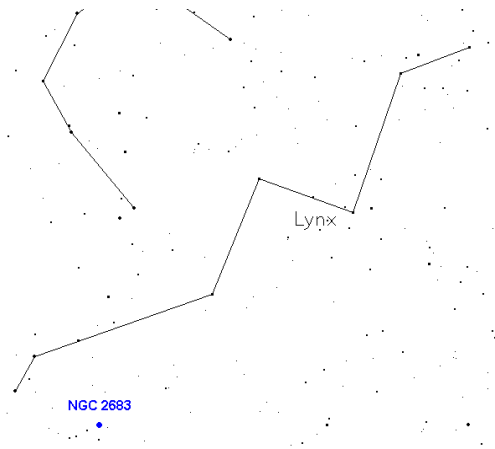
# Deepsky Beauties:

## May 2009

*All objects in this article can be observed underneath a dark sky with telescopes with a maximum of 8 inch (20cm). Most objects can already be observed with smaller scopes or binoculars.*

This month we will pay a visit to a few constellations. We start with the Lynx. This constellation was introduced in the 17<sup>th</sup> century to close the gap between Auriga and Ursa Major. The name 'Lynx' was probably chosen because of the faint stars that form this constellation. Only the ones with 'Lynx-eyes' (people with a good vision) can distinguish its shape.

Our first stop is at **NGC 2683**, nicknamed 'The UFO Galaxy', because of its appearance which looks like a silver saucer. This edge-on spiral galaxy has a magnitude of 9.7. It's pretty large and already good visible through medium sized telescopes. There is a long line visible with a bright core, where a lot of old, yellow coloured stars are located. The brightness of the galaxy decrease gradually to the edges.

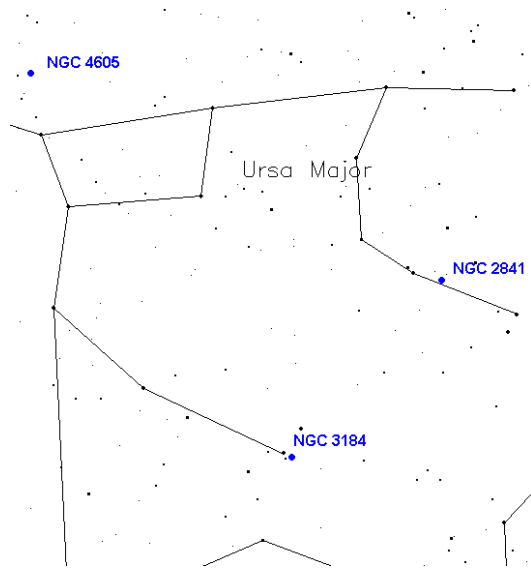


We continue with a few galaxies in Ursa Major. This constellation is visible the whole year through, but stands high in the night sky this month. Perfect to observe!

The spiral galaxy **NGC 2841** is one of the beautiful galaxies in Ursa Major. This object is located at a distance of 46 million light years and is comparable with most bright Messier galaxies if it comes to brightness. NGC 2841 is already visible through small telescopes as an oval, milky cloud with a bright, oblong core. Definitely a must see!

Our next target is **The Little Pinwheel Galaxy**, NGC 3184. This galaxy is located at the border with Leo Minor and is therefore easy to find between the stars Tania Borealis and Tania Australis. This spiral galaxy is fainter than NGC 2841 and it's a challenge to find. It is a relatively large, round object with a core that is a little bit brighter than the halo. Overall the picture reminded me of a planetary nebula.

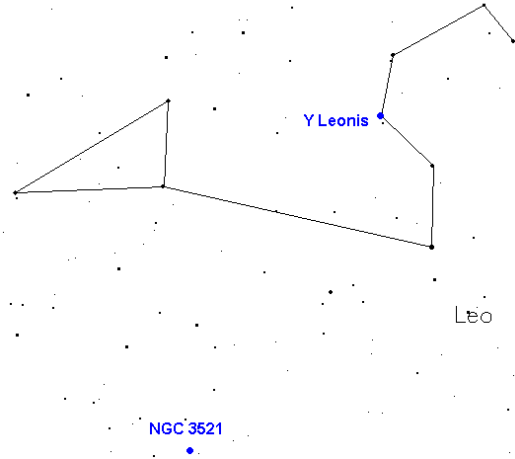
The last object we'll discuss in Ursa Major is the spiral galaxy **NGC 4605**. This nice edge-on galaxy has a magnitude of 10 and is pretty good visible. The galaxy is oblong and has an elongated, oval shaped core. It's possible to see a dark dust cloud on the Westside of the galaxy, however its necessary to observe this object comprehensively.



We leave Ursa Major behind us and take a closer look to some targets in Leo. Here we find the pretty, narrow double star **Y Leonis**, better known as the star Algieba; a beautiful, bright duo, existing of two nice giants.

The couple can be split with telescopes to two stars of magnitude 2.2 and 3.5. Both stars have a nice golden colour.

In Leo we find another nice spiral galaxy that's often missed because of the Leo Triplet, which is located near it: NGC 3521. An oval shaped galaxy of magnitude 9.2. Its core is relatively small but bright. A thin halo surrounds the core. This object is definitely a must see! It's possible to see NGC 3521 through small telescopes from a dark observing site, but larger telescopes will reveal much more details.



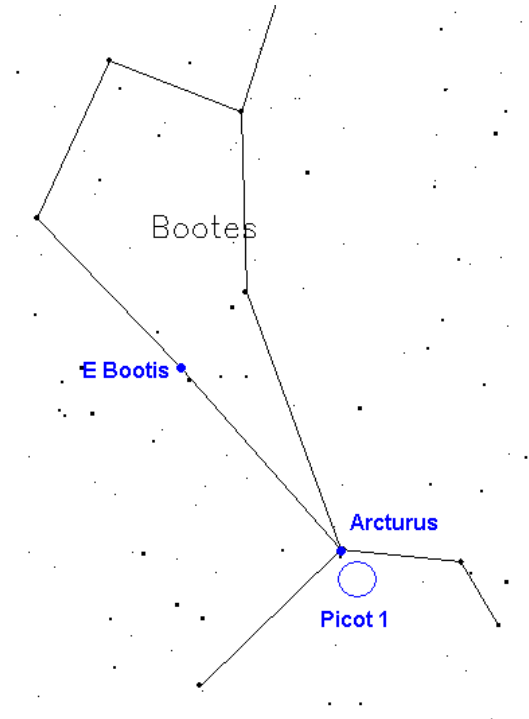
Next on our target list is the constellation Boötes, the Herdsman. According to one of the many myths around Boötes, he drove his oxen into the constellation Ursa Major, together with his two hunting dogs: Chara and Asterion (Canis Venatici). Boötes had tied the oxen to the polar axis and kept the night sky in rotation.

Let's see what object Boötes contains for us. Directly underneath the star Arcturus we find the asterism **Picot 1**, also known as Napoleon's Hat. This stargroup looks indeed like the hat of Napoleon. The seven stars that form Picot 1 have a magnitude from 9 to 11. Therefore you observe this object best with a telescope underneath a dark observing site, free from light pollution.

Above Napoleon's Hat we find one of the three brightest stars on the night sky: **Arcturus**. The ancient Greece called this star 'guardian of the bear' because of its location opposite to Ursa Major. They used this star to determine the harvest time. If the star disappeared behind the horizon, also the bears and other animals left to keep their winter sleep. The Greece than knew that the time was come to harvest the crop.

Arcturus is a red giant and is located at a distance of almost 44 light years from earth.

Another red giant is the star  $\epsilon$  **Boötis**, better known as the star Izar. This multiple star has an orange colour, its companion bleu / green. Izar is one of the nicest doubles on the sky. Observe it with a telescope to split the pair.

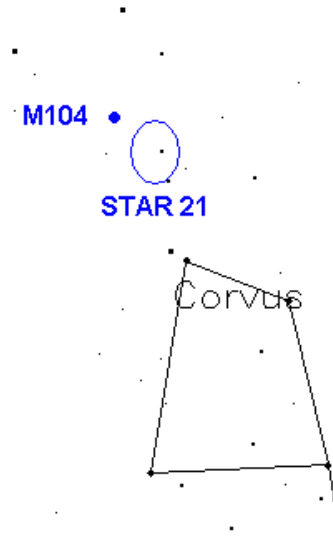


Finally we'll observe a remarkable duo in Virgo. Also Virgo, the virgin, knows many myths. One of them is about Astraea, the daughter of the god Zeus and goddess Themis. Astraea was known as the goddess of justice, because of her location on the sky, next to Libra, the scales. She ruled the world with her wisdom, until mankind became too ruthless and Astraea returned to the night sky.

As I said we'll find a remarkable pair: the spiral galaxy Messier 104 and the asterism STAR 21 or Jaws.

**Messier 104** is also called The Sombrero Galaxy because of its striking appearance. It has a magnitude of 8, whereby this object is already visible through large binoculars. Yet you need a telescope with an opening of at least 8" (20 cm) to see the prominent sombrero shape, according as the dark dusk cloud that runs through the length of the galaxy.

If you use a low magnification, you'll see a few bright stars next to M104 in the shape of a shark. This is the asterism **Jaws**. Three bright stars mark the teeth's, some fainter stars form the back of the shark and some bright ones the fin and tail. The jaws are located in the direction of M104



Have fun observing these objects!

*Demelza Ramakers (April, 28th 2009)*

Sterrenbeeld	Object	Type	Magnitude	Grootte/sep	RA	Dec.
Lynx	NGC 2683	Galaxy	9.7	8.8' x 2.5'	08h52m41s	33°25'
Ursa Major	NGC 2841	Galaxy	9.3	7.7' x 3.6'	09h22m02s	50°59'
Ursa Major	NGC 3184	Galaxy	9.5	7.6' x 7.4'	10h18m17s	41°25'
Ursa Major	NGC 4605	Galaxy	10.0	5.9' x 2.4'	12h39m59s	61°36'
Leo	Y Leonis	Double star	2.2 & 3.5	4.4"	10h19m58s	19°50'
Leo	NGC 3521	Galaxy	9.2	11.2' x 5.4'	11h05m49s	-00°02'
Boötes	Picot 1	Asterism		20' x 7'	14h15m18s	18°32'
Boötes	Arcturus	Star	-0,04		14h14m40s	19°11'
Boötes	ε Boötis	Multiple star	2.5	2.8"	14h44m59s	27°04'
Virgo	M104	Galaxy	8.3	8.6' x 4.2'	12h39m59s	-11°37'
Virgo	STAR 21	Asterism			12h38m41s	-11°32'