

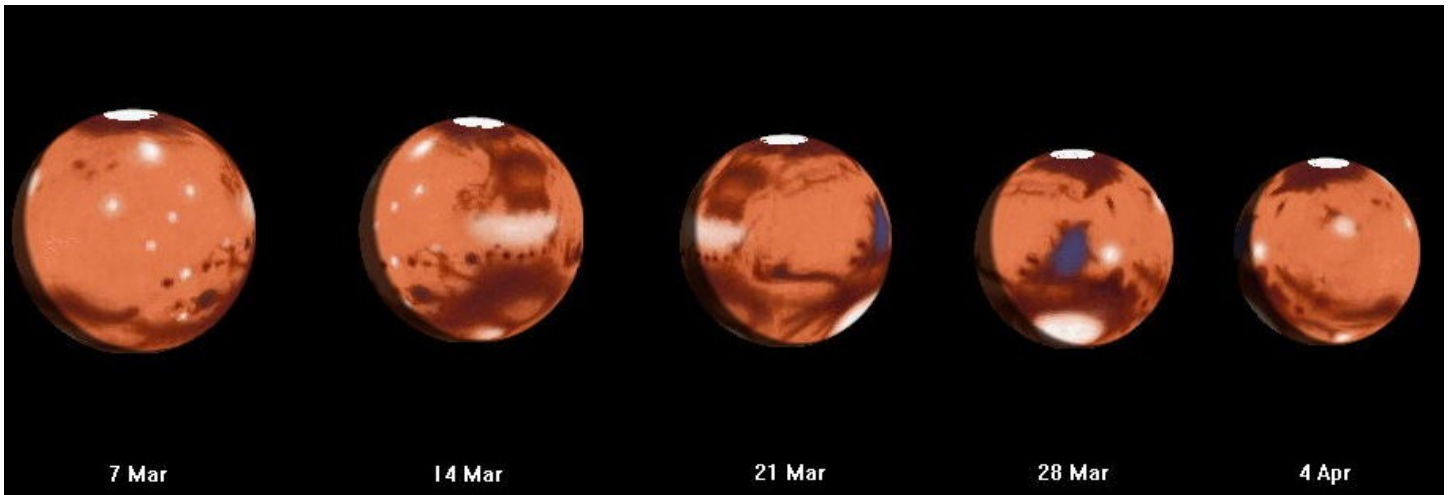
STARDUST

Newsletter of the Royal Astronomical Society of Canada
Edmonton Centre



March 2010

Volume 56 Issue 7



*Mars continues to shrink, but Saturn is coming up to opposition April 21.
See The Planets, page 3.*

Inside this Issue

Contact Information.....	page 2
Upcoming Events, Meetings, Deadlines, Announcements.....	page 3
President's Report.....	page 3
The Planets.....	page 3
Greek Mythology.....	page 4

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Stardust	Articles for Stardust may be submitted by email to mward@interbaun.com . Submission deadline is the last day of the previous month (e.g. for the May issue submit by 30 Apr). Submit in any standard document format (MSOffice, OpenOffice, AbiWord, plain text). TimesNewRoman 10pt single-spaced is preferred. Don't bother with fancy formatting, odd spacing, strange fonts, etc.; it will only be discarded. Graphics (GIF or JPG please) may be submitted as separate files, and clearly identified.

Edmonton Area Astronomy Discussions

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Upcoming Events, Meetings, Deadlines, Announcements

MEETINGS 2010

	General	Council	Observers	NewMoon	FullMoon	Blackfoot
Jan	11	25	4	15	30	15-16
Feb	8	22	1	13	28	12-13
Mar	8	22	1, 29	15	29	12-13
Apr	12	26	28	14	28	16-17
May	10	24	24	13	27	14-15
Jun	14	28	28	12	26	
Jul			26	11	25	
Aug			23	9	24	6-7
Sep	13	27	20	8	23	3-4
Oct	18	25	20	7	22	8-9
Nov	8	22	17	6	21	5-6
Dec	13		20	5	21	3-4

MEETING LOCATIONS 2010

Regular General Meetings are at 7:30pm in Telus World of Science, 11211 – 142 St. *follow the signs, from the main entrance*

Council Meetings are at 7:15 pm in the ATA Building, 142 St & 111 Ave. *follow the signs, from the main entrance*

Observers Meetings: *location varies*

CALL FOR ARCHIVAL MATERIAL

Do you have documents or photographs relating to RASC Edmonton Centre's activities, history, personalities, events, or anything? Donate them to the archives! Contact **Roxy Garstad** at garstadr at macewan.ca or see the web site for contact information.

President's Report by Sherry Campbell

I have to admit that I have not done much astronomy these past few weeks. I have been watching the Olympics on TV every night, cheering on Canada every step of the way. Now it is time to get back to astronomy, especially for March. Anyone who is into observing deep sky knows that March is galaxy season!

March is also a good time for observing. The Sun still sets at a reasonable time and the nights are still long. Yes, we may get the typical March cold snap this year, but it will be perpetual twilight in two months, so now is the time to get out.

March is also the "Messier Marathon" night. From our latitude, we can't see every Messier, but we can catch most of them. For those that have never heard of the term, a Messier Marathon is when an observer tries to find the most Messier objects in one night. Obviously there is no time to really study the objects, but only enough time to find them. There are several books on the market that have the objects already planned out for you, when to observe them and in what order. In fact, our library has a Messier Marathon book that members can check out for the month. If you have always wanted to try a Messier Marathon, but were unprepared to do the planning, check out our library. Be prepared! A Messier Marathon lasts the entire night from dusk to dawn.

Next month is our April Fools' meeting. Your Council is

busy planning the usual tomfoolery, so expect to be entertained. In light of this, there will be no guest speaker for April. April's meeting will be a member's night, so if you have a short 15-minute presentation you would like to make, please contact me.

You will also find in the April issue of "StarBUST", money motions for your consideration. The membership will be voting on these money motions at the May general meeting.

I hope everyone had a great time at the Winter Light Festival Saturday. I attended the Winter Light Festival last year and although it was bitterly cold, it was still most enjoyable. I am sure the Festival this year was just as much fun.

We are moving forward with the planning of the General Assembly of the RASC for 2012. It was decided in a GA meeting that the dates of the GA will be June 29-July 2, 2012. The next step is to have our request to hold the GA formally accepted at the next National Council meeting, which is March 27, 2010. Our National Council Reps will be making that motion on our behalf. Stay tuned for more information from the committee at future meetings.

Hopefully our March observing window will be relatively warm, so I hope to see everyone out at Blackfoot for observing. Clear skies!

The Planets by Murray Paulson

Mercury starts off this month headed away from us around the sun. At the beginning of the month, it sits at a distance of 6 degrees from the sun and it will quickly disappear into the sun's glare. Mercury will be at superior conjunction on March 14. Over the following 3 weeks Mercury will swing out into the evening sky to the April 8th Greatest Eastern Elongation. These spring evening apparitions are the best! Mercury sets almost 2 hours after the sun, so you have ample opportunity to find it in the evening sky. This year we have a fantastic advantage with **Venus** acting as our guide star. The two will sit in close proximity for over a week's time. On April 4th Mercury will pass

3 degrees north of Venus, which also coincidentally is the date of Mercury's dichotomy. It will shine at magnitude -0.4 and show a 6.9" half disk at the time. It fades as it reaches the Greatest Eastern elongation on the 8th, when it shines at magnitude 0.0 and shows a 7.7" fat crescent. It will sit 19.35 degrees from the sun at this time.

This month starts off with **Venus** sitting far enough from the sun to make it easily visible in the evening twilight. Venus shines at magnitude -3.9 and is a fat 10" gibbous disk in the eyepiece. Over the month it will slowly climb up the ecliptic and share in a duet with Mercury in the first week of April. Venus sits just

below the ecliptic and Mercury is rising above it as it approaches Venus. It maxes out at 2.7 degrees above the ecliptic on the 8th of April. Meanwhile back at Venus, we will see a slight increase in the size in the eyepiece to 10.7" by the first week of April. It will sit at an elongation of 21 degrees by this time.

It certainly has been hard to keep up with **Mars** due to the the poor weather over the month. I have reports from (various observers) Larry Wood that he has had very good seeing on a few nights. I had one evening where a haze built up as the night progressed, and the image was steady and sharp. A little dim, but very sharp. At the beginning of March, Mars shines at magnitude -0.2 and shows a 10.7" disk in the eyepiece. Over the month Mars will shrink slightly to 9.45" and it will dim slightly to magnitude 0.0. I have included a graphic created by Guide that shows the side of Mars that will be visible at weekly intervals over the month as viewed at about 10 pm local time. Despite its size, it still is worth a look if the seeing is good. On the night of Feb 23, I saw Syrtus Major centered on the disk at 23:45 local

time. Seeing wasn't great, but the polar cap was sharp and the major features were easily seen.

Jupiter is in conjunction with the sun at the beginning of the month, and will slowly make it back into the morning sky as the spring progresses. It would be visible in late March or early April rising before the sun except the ecliptic is so shallow that you will not be able to see it in the twilight glare.

Here we are at **Saturn's** month! Opposition will be on March 21st where it will shine at magnitude 0.5 and in the eyepiece the disk will be 19.5". This is great for Astronomy days in early April, as Saturn stole the show last year. We will get two good planets for the public sessions and with the promise of warmer weather, it will make for good observing. The rings will be tipped up at 3.6 degrees coming into March, and they will become more shallow as the month progresses, a perspective effect from our orbital point of view. By month's end, the angle will be slightly less than 3 degrees.

Greek mythology: Leo and Herakles by Michael Ward

The Greek word *leōn* (λέων) and the Latin equivalent *leo* both mean *lion*. Saying *Leo the Lion* is almost like saying *Lion the Lion*.

This lion owes its place among the stars to the greatest hero of the Greeks, Herakles (or Heracles). He was also very popular with the Etruscans, who apparently had slight difficulty pronouncing the name, and so it got just a bit mangled. The Etruscans then passed on the mangled name to their neighbours, the Romans, and Herakles became Hercules. Stories about Herakles are numerous, some of them clearly made up much later in the tradition. The lion in our story was the first of a series of tasks imposed upon Herakles as punishment.

The name Herakles means something like *glory of Hera* [1], which is puzzling: Hera despised Herakles because he was the offspring of Zeus (her husband) and another female, one of Zeus's many affairs. In numerous stories, Hera tries to thwart Herakles and generally cause him as much trouble as possible. In the end it didn't matter; Herakles accomplished every task laid before him and overcame every obstacle, and was made a god, as had been promised. This was extremely unusual. He is the only hero who became a god.

Herakles's mother was Alkmena, an ordinary mortal [2], albeit extremely beautiful, as all females in myths are. Her husband-to-be Amphitryon was out of town [3] when Zeus, disguised as Amphitryon, spent what she believed was their wedding night with her. He arranged for the night to last three times longer than usual so he could have more time to enjoy Alkmena's excellent company. The following day, the real Amphitryon came home, and there was much confusion. The famous prophet and holy man Tiresias explained what happened, and the real wedding took place the same day.

Like many heroes, Herakles had challenges from birth: Hera sent two snakes to kill the infant, but the infant Herakles strangled them. Remarkable little tyke. He had a troubled youth. A single example will do: His music teacher, Linus, made disparaging remarks about his musical talents – or lack thereof. Herakles flew into a rage and killed him.

One who commits such a murder was said to be under *miasma*, a stain or pollution, also called *blood guilt*, which must be cleansed or purged. Then as now, wealthy and famous people don't pay the same penalties for crimes as ordinary folk. The usual way to atone for such things, for one in Herakles's position,

was to perform rites of purification, which often involved exile or a long journey or serving someone else as if a slave.

Herakles got through the atonement for Linus's death, but murder again got him into trouble. Hera drove him insane, and in this fit of madness, he killed his wife and children. Afterwards, having regained his senses and realizing what he has done, what Hera drove him to, he is insane with grief and sadness. Under *miasma* again, he must be purified of blood guilt of the worst kind. He must become a servant to a lesser man, a jackass named Eurystheus, and do whatever tasks Eurystheus assigns. These are the so-called Twelve Labours [4] of Herakles, which Eurystheus hoped Herakles would not survive. If he survived, however, he was promised immortality. The First Labour was to deal with the Nemean [5] Lion.

It was no ordinary lion. It could not be killed by any conventional means; ordinary weapons were useless against it. In one version of the story, Herakles made himself a huge club from a tree branch and beat the lion with it. In another version he strangled it with bare hands. He then skinned it using its own claws to cut through the hide. The club and lion skin became his trademark symbols. In art he is often depicted carrying a club and wearing the skin. Sometimes he wears the skin as a sort of hood, with his face looking out its mouth. It looks rather silly, really. Why the lion was placed among the stars isn't entirely clear; perhaps as a reminder of Herakles's mighty deeds. It is interesting to note that this group of stars, with some variation, was known as a lion to the Egyptians, Persians, Indians and others, probably long before some Greek decided it was the one slain by Herakles [6].

[1] From *Hera* the goddess, wife of Zeus, and *kleos*, meaning *glory, fame* or *reputation* (Ἥρα + κλέος).

[2] As ordinary as they get in Greek myths: her father was Electryon, king of Mycenae.

[3] The town being Thebes – the Thebes in Greece, not Egypt, which the Egyptians didn't call Thebes, but *ta-ipet-resy*, meaning *southern harem*. That sounded kind of like “thebes” to the Greeks, apparently, and the name has stuck.

[4] The word translated as *labour* is *athlos* (αθλος) which in Greek actually means more like *contest* or *competition* or *conflict*. The neuter *athlon* (αθλον) also means *prize* or *reward*, that is, what you get for winning the contest. Whence such words

as *athlete* (ἄθλητής, one who competes, a champion) and *biathlon*, *triathlon* (two contests, three contests), etc.

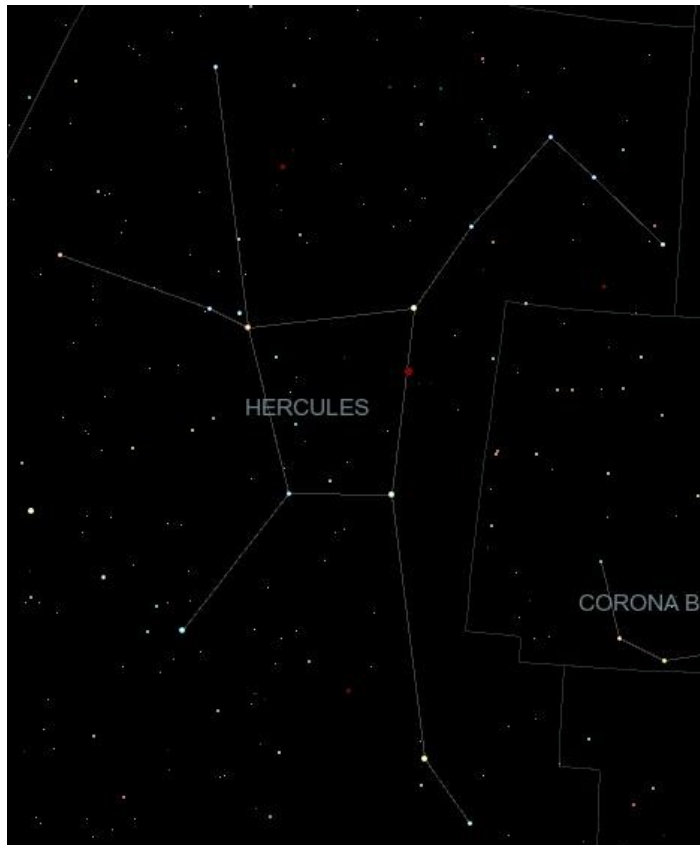
[5] Nemea: some 25km north of Argos, 40km south west of

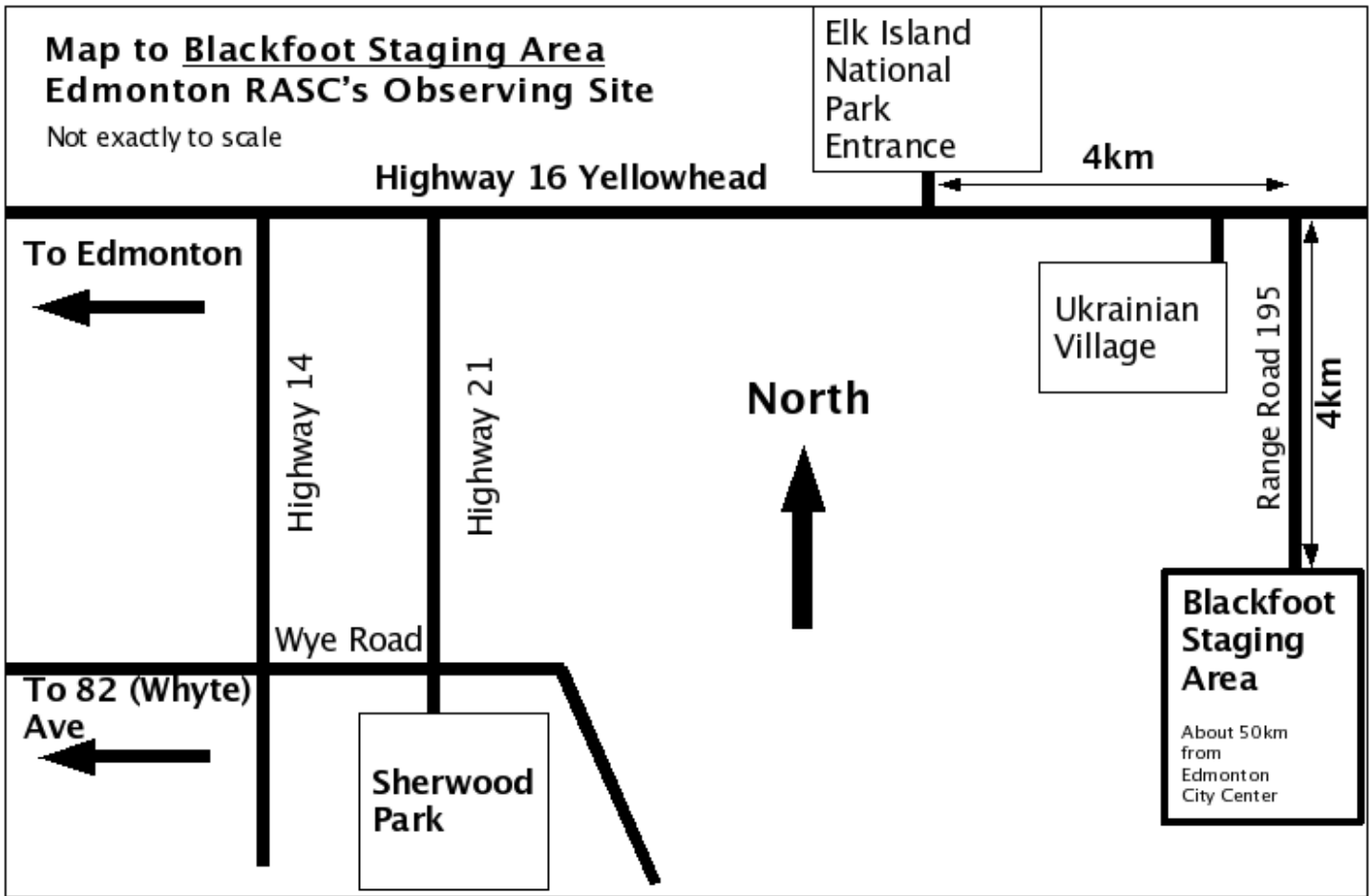
Corinth, give or take.

[6] In China, however, this group of stars is part of a horse; see http://www.starryskies.com/The_sky/constellations/leo.html

Sources; (considerably abridged): Apollodorus, 2.4.5-2.8.5; 3.9.1; Euripides, *Heracles*; Herodotus 7.193.2; Homer, *Odyssey* 11.601-627; *Homeric Hymn* 15; Hyginus, *Astronomica* 24, *Fabulae* 29, 30-35.

Images courtesy of KStars <http://edu.kde.org/kstars/>





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