

# Saskatoon Skies

The Newsletter of the Saskatoon Centre of the Royal Astronomical Society of Canada

Vol. 39, No. 6

June 2008

## Astronomy Day 2008



*Photo by Jeff Swick*

Saskatoon RASC members celebrated International Astronomy Day in style, with well-attended public events at three different locations. On Friday, May 9, dozens of people were treated to a firsthand glimpse of celestial objects through members' telescopes set up at the Lakewood Civic Centre. On Saturday, May 10, a daytime display in the Saskatoon Farmers' Market was followed by an evening observing session at Beaver Creek.



Saskatoon Centre

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# MEMBERSHIP? IT'S NEVER TOO LATE TO JOIN!

**Regular: \$69.00 /year**

**Youth: \$36.75 /year**

**Lifetime: \$2100**

The Saskatoon Centre operates on a one-year revolving membership. You will be a member for the next 12 months no matter when in the year you join. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our Saskatoon Skies newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications. Renew through the membership coordinator, Mike Clancy, or renew through the National Office and let Mike know that you did!

## Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the U of S Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook
- The Journal of the RASC (electronic format)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- rent the Centre's Telescopes  
<http://homepage.usask.ca/ges125/rasc/telescopes.html>
- discounts to Sky & Telescope Magazine\*
- free, no-cost, no-obligation, 3-month temporary membership if you don't want to join right now!

\*New subscription or renewal of Sky & Telescope? Send new info or renewal notice, plus credit card # to Norma Jensen, 128 – 4th Street East, Saskatoon, SK S7H 1H8, or email her at [njensen@scs.sk.ca](mailto:njensen@scs.sk.ca) .

## U OF S OBSERVATORY

The U of S Observatory is open to the general public every Saturday of the year. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear nights, visitors may look through the vintage 6-inch and tour several displays. Current events are recorded on the Astronomy Information Line at 966-6429.

### Observatory Hours:

January-February	7:30-9:30 pm
March	8:30-10:30 pm
April	9:30-11:30 pm
May-July	10:00-11:30 pm
August	9:30-11:30 pm
September	8:30-10:30 pm
October-December	7:30-9:30 pm

## SASKATOON CENTRE'S MAIN OFFICERS:

**President** – Garry Stone, 857-4707  
**Secretary** – Al Hartridge, 373-0034  
**Vice-President** – Barb Wright, 249-1990  
**Treasurer** – Norma Jensen, 244-7360

## Bottle Drive & Canadian Tire \$

By Darrell Chatfield

If you cannot make it to a meeting but would like to contribute your Canadian Tire money please call me at 374-9278.

**Newsletter Editors** –Tenho Tuomi, Ken Maher, Christine Kulyk

**Copy & Collate** – Les & Ellen Dickson

**Labels & Temps** – Mike Clancy

**Web Posting** – Gord Sarty

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science articles. **Articles can be sent by mail in any format to the Centre's mailbox.** Submitted materials can be returned upon request. Submissions may also be sent by e-mail to the editor at <[tuomi@yourlink.ca](mailto:tuomi@yourlink.ca)>— preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached files.

A separate by-mail subscription to Saskatoon Skies is available or \$15.00 per year. Saskatoon Skies is also posted on our Saskatoon Centre homepage as a .pdf file and can be downloaded free-of-charge. Members may choose to receive the newsletter by regular mail or via the Internet. Articles may be reprinted from Saskatoon Skies without expressed permission (unless otherwise stated), but source credit is requested. DEADLINE for submissions is the 26th of each month. Saskatoon Skies accepts Commercial advertising. Please call the editor for rates. Members can advertise non-commercial items free of charge.

**LIGHT POLLUTION  
ABATEMENT  
WEBSITE AT:  
[www.rasc.ca/lpc/lpc.htm](http://www.rasc.ca/lpc/lpc.htm)**

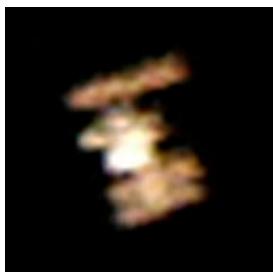
## RASC CALENDAR OF EVENTS

June 16	RASC Executive Meeting – 6:30 pm, 175 Physics, U of S	Garry Stone	857-4707
June 16	RASC General Meeting – 7:30 pm, 175 Physics, U of S	Garry Stone	857-4707
Jun 27-Jul 1	RASC General Assembly (Toronto)	<a href="http://www.rasc.ca/ga2008">http://www.rasc.ca/ga2008</a>	
July 4	Observer's Group – 9:30 pm, Sleaford Observatory	Larry Scott	934-5801
July 4 - 6	Alberta Star BQ, Eccles Ranch Observatory, Caroline, AB	<a href="http://calgary.rasc.ca/starbq2008.htm">http://calgary.rasc.ca/starbq2008.htm</a>	
Aug 8	Observers Group - 9:00 pm, Sleaford Observatory	Larry Scott	934-5801
Aug 2 - 10	Mt.Kobau Star Party, Osoyoos, BC	<a href="http://www.mksp.ca/">http://www.mksp.ca/</a>	
Aug 12	Noctilucent Cloud watch season ends	Rick Huziak	665-3392
Aug 28 - 31	Saskatchewan Summer Star Party (12 <sup>th</sup> Annual), Cypress Hills Interprovincial Park	<a href="http://homepage.usask.ca/~ges125/rasc/starparty.html">http://homepage.usask.ca/~ges125/rasc/starparty.html</a> - Barb Wright	249-1990
Aug 31	Beaver Hills Dark-sky Preserve Reunion, Elk Island Nat. Park, AB	Rick Huziak	665-3392
Sep 2 - 7	Northern Prairie Starfest, Black Nugget Lake, Toffield, AB	<a href="http://www.edmontonrasc.com/nps.html">http://www.edmontonrasc.com/nps.html</a>	
Sep 5 - 7	Spruce Woods Star Party, Spruce Woods Prov. Park, Carberry, MB	<a href="http://winnipeg.rasc.ca/sprucewoods/">http://winnipeg.rasc.ca/sprucewoods/</a>	
Sep 15	RASC Executive Meeting - 6:30 pm, 175 Physics, U of S.	Garry Stone	857-4707
Sep 15	RASC General Meeting - 7:30 pm, 175 Physics, U of S.	Garry Stone	857-4707
Sep 25 - 28	Alberta Star Party, Starland Recreation Area Campground, Drumheller, AB	<a href="http://www.calgary.rasc.ca/asp2008.htm">http://www.calgary.rasc.ca/asp2008.htm</a>	

### Minutes of the Executive Meeting May 12, 2008

by Al Hartridge

1. Meeting called to order at 6:30 pm.
2. Approval of the previous minutes: Moved by Jim Young, seconded by Rick Huziak, and carried.
3. Financial Report by Norma Jensen: At present there is \$4,768.18 in chequing account, \$313.29 in fundraising account, and \$19,585.56 in four GICs.
4. National Rep: Because of the changes with charitable organizations there will be a National fee for anyone wishing to belong to National. This will not be broken down. Our Centre can set its own fee.
5. Building Committee Meeting: Les suggests that this group meet. Date set for May 29, 2008.
6. General Assembly: Les and Barb are getting a presentation together for the up coming GA.
7. Barb indicated that she will need volunteers at our 2009 GA to transport people from Saskatoon airport to the Cypress Hills.
8. Meeting adjourned at 7:30 pm.



International Space Station  
photographed by Garry Stone,  
June 1, 2008.

### Minutes of the General Meeting May 12, 2008

by Al Hartridge

1. Meeting called to order at 7:30 pm.
2. Approval of minutes of the previous meeting: Moved by Brent Burlingham, seconded by Jim Young, and carried.
3. Events Committee: Barb Wright gave a report on the turnout for Astronomy Day events. Friday night at Lakewood Civic Centre, there was a fair turnout, but require better publicity in the future. At the Farmers' Market on Saturday, people were very receptive. Saturday night at Beaver Creek, 60 people turned out, but viewing was poor. Twelve people attended the gastronomy supper at Mano's on 8th Street.
4. National Report: Les Dickson stated that the Charitable Organization act changes have forced National to set its own fee at \$40.00. Our Centre can set its own fee.
5. Light Pollution: Rick Huziak demonstrated the small postcard that can be sent to the Government. He also talked about ongoing efforts in Swift Current.
6. Newsletter: Send photos of Astronomy Day to Tenho or Christine.
7. Wanuskewin: Requesting talks or star nights this summer. Will need volunteers to do this.
8. GA/SSSP 2009: Barb would like volunteers to provide transportation to Cypress Hills for people flying in via Saskatoon airport. We will also publish alternatives for people to get there on their own.
9. Presentation: "Space Elevator Competition 2010," by Patrick Allen of the Uof S Space Design Team.
10. Meeting adjourned at 9:10 pm.

## MEETING, MONDAY, JUNE 16, 7:30 PM

Room 175, Physics Bldg, U of S

*There will be an Executive Meeting at 6:30 PM*

## Tunguska & Other Great Hits: Impact Astronomy

by Christine Kulyk,  
SkyNews Assistant Editor

## Astronauts Wanted!

The Canadian Space Agency has launched a national recruitment campaign for individuals who want to be part of the next generation of Canadian space explorers.

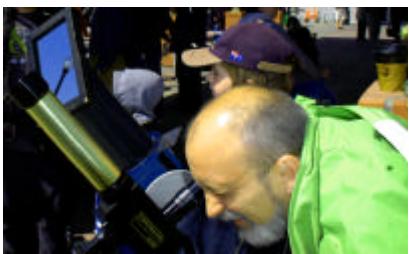
If you believe you have the “right stuff,” see <http://www.space.gc.ca/asc/eng> for detailed information and an application form.

Deadline is June 26, 2008, so don’t delay!

## BOOKS FOR SALE

All items will be available at our next meeting or call 249-1119, or email [breeves@sasktel.net](mailto:breeves@sasktel.net)

<b>Title</b>	<b>Author</b>	<b>#</b>	<b>Price</b>					
RASC 2007	RASC	3	\$5.00	Deep Sky Observer's Guide Stars	N. Bone	1	\$14.00	
Skywatcher's 08	S. Shadick	2	\$12.00	Exploring the Night Sky	Zim Baker & Chartrand	1	\$10.00	
Skywatcher's 07	S. Shadick	6	\$5.00	Exploring the Sky by Day	T. Dickinson	11	\$9.50	
Skywatcher's 06	S. Shadick	1	\$2.00	Patterns in the Sky	T. Dickinson	10	\$9.50	
<b>Books</b>								
The Backyard Astronomer's Guide	Dickinson & Dyer	2	\$40.00	S & T Star Wheel	K. Hewitt-White	4	\$16.00	
The Beginner's Observer's Guide	L. Enright	3	\$19.00	Messier Card (unlaminated)	R. Sinnott	2	\$24.50	
Observer's Handbook 2006	RASC	5	\$5.00	Deep Sky Wonders	G. Seronik	2	\$20.00	
Observer's Handbook 2005	RASC	1	\$2.00	The Messier Objects	Sky & Telescope	1	\$15.00	
Practical Astronomy	S. Dunlop	3	\$14.00	Scientific American Book of the Cosmos	S. & T Star Wheel	1	\$19.00	
Summer Stargazing	T. Dickinson	5	\$18.00	Skyways-Astronomy Handbook	Messier Card (unlaminated)	9	\$5.00	
Celestial Sampler	S. French	2	\$26.00	for Teachers	T. Dickinson	2	\$24.50	
Firefly Astronomy Dictionary	Firefly	3	\$14.00	Saskatoon's Stone	T. Dickinson	10	\$39.00	
Firefly Planisphere	Firefly	1	\$19.00		K. Hewitt-White	1	\$48.00	
Night Sky Atlas	R. Scagell	3	\$24.00	On the Moon	R. Sinnott	4	\$16.00	
Stargazing with a Telescope	R. Scagell	2	\$14.00	On Mars	G. Seronik	2	\$24.50	
Beautiful Universe	Sky & Telescope	2	\$12.00	Seeing in the Dark	S. & T Star Wheel	1	\$20.00	
There Once was a Sky Full of Stars	Crelin & Ziner	2	\$20.00		Messier Card (unlaminated)	9	\$5.00	
Space 50 Years and Counting	Sky & Telescope	2	\$13.00		T. Dickinson	2	\$19.00	
The Moon Observer's Guide	P. Grego	4	\$14.00	RASC Centennial Mug	T. Dickinson	11	\$9.50	
Isabelle Williamson Lunar Observing Program	RASC	7	\$10.00	RASC Stickers, blue or white	T. Dickinson	10	\$1.00	
The Sun Observer's Guide	T. Spence	3	\$14.00	SSSP 2001 Pin (Summer Triangle)	T. Dickinson	4	\$2.00	
Moon Map (laminated)	Sky & Telescope	7	\$6.50	SSSP 2002 Pin (Comet Petriew)	T. Dickinson	35	\$2.00	
Field Map of the Moon	Sky & Telescope	8	\$12.50	SSSP 2006 Pin (10th)	T. Dickinson	46	\$4.00	
Lunar 100 Card	Sky & Telescope	1	\$10.00	SSSP 2007 Pin (DSP)	T. Dickinson	35	\$5.00	
Mars Observer's Guide	N. Bone	2	\$14.00					
<b>Miscellaneous</b>								
				RASC Centennial Mug	RASC	2	\$5.00	
				RASC Stickers, blue or white	RASC		\$1.00	
				SSSP 2001 Pin (Summer Triangle)	RASC	13	\$2.00	
				SSSP 2002 Pin (Comet Petriew)	RASC		\$2.00	
				SSSP 2006 Pin (10th)	RASC		\$4.00	
				SSSP 2007 Pin (DSP)	RASC		\$5.00	



*Gordon Sarty and other Centre volunteers were on hand to demonstrate telescope operation and answer questions from the public on Astronomy Day*



*My granddaughter Lexy McLeod, the Star Child.*

*Photos by Jeff Swick*

## Editor's Corner

by Christine Kulyk

Since this is my first issue as part of the *Saskatoon Skies* editorial team, I'll begin by telling you a bit about myself. I've been a member of the Saskatoon Centre since 2005, but my history with the RASC goes way back to my teenage years, when I first became a member in Montreal, where I grew up. Later, I lived in Edmonton for several years and was an active member of the Edmonton Centre, followed by several more years with the Kingston Centre.

Professionally, I'm a freelance editor and writer. I joined the crew of *SkyNews* magazine as Assistant Editor during its first year of publication in the current glossy format, in 1995. If you come to the June meeting, you'll have the chance to hear about some of

the scientists I've interviewed over the years, and some of the things they've taught me about impact astronomy.

I'm looking forward to reading your submissions to *Saskatoon Skies*, seeing your photos, and getting involved in many astro-activities during the 2009 International Year of Astronomy. Keep us posted about your planned projects and doings!

**Congratulations** to Brent Burlingham, who recently completed the requirements for his RASC Messier Certificate! Brent received his award from Saskatoon Centre President Garry Stone at the May 12 meeting.

### Farewell by Ken Maher, Outgoing Editor

I would like to thank everyone in the Saskatoon Centre for allowing me to be a part of your Newsletter team for the past 29 issues (where does the time go?). At the end of this month I will be moving to Collingwood ON. It has been a pleasure getting to know everyone these past few years. Coming out to the meetings and other Centre events has always been a highlight as everyone made me feel both welcomed and appreciated. Keep up the good work. And speaking of

which, I feel indebted to leave you all with a nod to Tenho, who was always patient with me through the learning curve and the odd deadline that got stretched too far. Make sure you continue to submit all those great articles and pictures so he, and his new co-editor Christine Kulyk can continue to do what they do best. If ever you find yourself in Southern Ontario, give me a shout. There will be a place to stay and a scope to borrow. Clear Skies.

## Stargazing at the Relay for Life

by Ron Waldron

On Friday evening, May 30, my wife mentioned she would like to go to Diefenbaker Park and visit with her staff in the Relay for Life. Since skies were clear, I said I would come along and bring my 10-inch Dobsonian telescope.

When I mentioned that I was with the RASC (sounds so official), the staff running the Relay were more than helpful, offering people to help carry the telescope to an appropriate dark area close to the action. At 9:30 pm, I set up, and the action began immediately.

People began lining up to see the rings of Saturn and returned time and time again for second and third looks. One person even offered to get me a coffee. After Saturn, I moved over to Albireo, then back to Saturn. The laser pointer was also a big hit, as many people wanted to know the names of some of the brighter stars. I quickly went over Arcturus, Vega, and Capella. To top it all off, we received a timely visit from the ISS, and I was elevated to "godlike" status as I predicted its appearance before it arrived. What a great night!

I strongly recommend that we include this yearly event in our outreach plans. It would only need three or four telescopes, and the crowds were so appreciative.

# Astronomy Day 2008

by Christine Kulyk  
Pictures by Jeff Swick

The Saskatoon Centre's celebration of International Astronomy Day in May 2008 proved once again to be a fine way to showcase the hobby of astronomy in general and our Centre activities in particular. Dozens of enthusiastic and interested people lined up for solar observing through telescopes or to view our large display area at the recently expanded Saskatoon Farmers' Market during the morning and afternoon of Saturday, May 10. A new display on Light Pollution and the problem of casino lighting drew considerable interest from passersby.

Evening observing sessions for the public were held on both Friday, May 9 (at the Lakewood Civic Centre in Saskatoon), and Saturday, May 10 (at Beaver Creek Conservation Area). Special thanks to all the Centre members who came out for these events and provided the many displays, handout materials, and especially the telescopes and binoculars to introduce new people to the wonders of stargazing. At least one young visitor was so impressed that he persuaded his mom to bring him to the May meeting. Let's hope his enthusiasm for astronomy will continue to grow and enrich our Centre activities in future!



Brent Burlingham & Les Dickson enjoyed meeting people at tables set up in the Farmers' Market.



Poster displays by Saskatoon Centre members drew considerable interest from the public.



Barb Wright enjoyed telling passersby about our Centre activities.



Solar observing gave daytime visitors a great chance to check out some of our members' telescopes.

# Our Milky Way Gets a Makeover

from [http://www.nasa.gov/mission\\_pages/spitzer/multimedia/20080603a.html](http://www.nasa.gov/mission_pages/spitzer/multimedia/20080603a.html)



Like early explorers mapping the continents of our globe, astronomers are busy charting the spiral structure of our galaxy, the Milky Way. Using infrared images from NASA's Spitzer Space Telescope, scientists have discovered that the Milky Way's elegant spiral structure is dominated by just two arms wrapping off the ends of a central bar of stars. Previously, our galaxy was thought to possess four major arms.

This artist's concept illustrates the new view of the Milky Way, along with other findings presented at the 212th American Astronomical Society meeting in St. Louis, Mo.

The galaxy's two major arms (Scutum-Centaurus and Perseus) can be seen attached to the ends of a thick central bar, while the two now-demoted minor arms (Norma and Sagittarius) are less distinct and located between the major arms. The major arms consist of the highest densities of both young and old stars; the minor arms are primarily filled with gas and pockets of star-forming activity.

The artist's concept also includes a new spiral arm, called the "Far-3 kiloparsec arm," discovered via a radio-telescope survey of gas in the Milky Way. This arm is shorter than the two major arms and lies along the bar of the galaxy.

Our sun lies near a small, partial arm called the Orion Arm, or Orion Spur, located between the Sagittarius and Perseus arms.

Image credit: NASA/JPL-Caltech



**Celestron CPC Rebates**  
CPC1100 - \$2799.95  
less \$200 rebate  
\$2599.95 Final Cost  
Free CPC shipping in June to Saskatoon

**TeleVue**  
10% Sale - All Refractors  
127is - Reg. \$7199.95 - \$6479.96  
101is - Reg. \$4499.95 - \$3,734.96  
10% Sale Ends June 12/08

**William Optics 110 Megrez Holiday Package**  
includes 2" Diagonal and 28mm UWAN eyepiece  
\$1649.95

**Celestron SkyScout \$100 Rebate**  
Reg. \$399.95  
After Rebate \$299.95  
Rebate ends - June 15

**Starry Night PRO**  
Starry Night Enthusiast

**Sky-Watcher**  
MAK180mm ED PRO & HEQ5 PRO  
\$1899.95

**All-Star Telescope**  
31020 Hwy. 2A, Didsbury, AB  
1-866-310-8844  
[www.All-StarTelescope.com](http://www.All-StarTelescope.com)  
(test drive equipment under dark skies)

*Astronomy Question of the Day, "The moon often interferes with observing and is at its worst when there is a full moon. Will this ruin my view of the upcoming total lunar eclipse?"*

## New Mnemonic for Order of Planets

by Tenho Tuomi

What is your favorite mnemonic for memorizing the order of the planets? Some interesting ones have been turning up on the RASCALS list recently.

**Man Very Early Made Jars Stand Up Nearly Perpendicular.**

**My Very Educated Mother Just Served Us Nine Pizzas.**

Or if you want to leave Pluto out:

**My Very Educated Mother Just Served Us Noodles.**

From children in a National Geographic planetary mnemonic contest:

**My Very Evil Master Just Sent Us Ninjas.**

And the winner, including the dwarf planets Ceres, Pluto and Eris:

**My Very Exciting Magic Carpet Just Sailed Under Nine Palace Elephants.**

Then the 11 recognized planets are Mercury, Venus, Earth, Mars, Ceres, Jupiter, Saturn, Uranus, Neptune, Pluto and Eris.

Someone wrote in, "Is it just me, or are some of these new mnemonics harder to remember than the actual order of the planets?"



# The Planets This Summer, 2008

by Murray D. Paulson, RASC Edmonton Centre

 [murray.paulson@gmail.com](mailto:murray.paulson@gmail.com)

June starts off with the two inner planets in conjunction with the Sun.

**Mercury** passes 2.8 degrees below the Sun (inferior conjunction) on June 7 at 7:00 am CST. At this time, Mercury will subtend 12.23" and shines dimly at magnitude 5.3. No, you are not going to see it in your scope! During the remainder of June, Mercury swings out to its greatest western elongation on July 1, when it will sit 21.78 degrees from the Sun, shine at magnitude 0.4, and be 36% illuminated, i.e. a fat 8" crescent. Over the rest of the month, it will fall back towards July 29 superior conjunction, but it will increase in brightness all the way down. It will be a good daytime object until it gets too close to the Sun for comfort. It is on the west side of the Sun at this time, so be extremely cautious not to let the Sun drift into your scope's field of view! At conjunction, Mercury will pass 1.7 degrees above the Sun. Three days later, any of you that have the good luck to see the total solar eclipse on August 1 will see Mercury 3 degrees away from the eclipsed Sun. It will shine at magnitude -1.7. For the remainder of August, Mercury will swing out into the evening sky, headed for greatest eastern elongation in September. It will be bright, at about magnitude zero or -0.5, so it will be a good catch at the SSSP. On August 21, Mercury passes 1 degree below Venus. At 20 degrees from the Sun, this will be an easy catch in twilight.

**Venus** will be only 0.25 degree west of the Sun on June 7, but it takes another day for it to go behind the Sun. June 8 marks the exact midpoint between two Venus transits: June 8, 2004, and June 8, 2012. This year, Venus passes dead centre behind the Sun. Very cool! Neither the Mercury conjunction nor the Venus event is visible, but they are notable as it is fairly rare to have both planets in conjunction in the same 24-hour period. After conjunction, Venus makes a very slow return to the eastern (evening) side of the Sun. The daily motion is only a small fraction of a degree. By July 1, Venus will sit only 6.2 degrees from the Sun. Give it a hunt while looking for noctilucent clouds in late June and early July. Venus will remain at magnitude -3.9 for most of the summer and will be situated for observing in early evening twilight during the summer star party season. (If you happen to be in Arctic Canada or one of the other privileged locations for viewing the August 1 total eclipse of the Sun, and with a clear horizon, you will see Venus 14.5 degrees east of the Sun.)

**Mars**, at magnitude 1.4, has now shrunk to 4.9" and only shows a disk under protest of great magnification. It has

recently passed through the Beehive Cluster (M44) on its way to Leo. On July 1, Mars will pass 40' above Regulus, and a few days later, it will join Saturn in a close conjunction (see below). For the rest of the summer, Mars moves on its way to Virgo.

**Jupiter** rises just after midnight and shines at magnitude -2.5 at the beginning of June. It will show a 45.3" disk in the eyepiece. It crosses the meridian just after 4:00 am, and it is still a hard sell coming into summer twilight. Things get better in July, as Jupiter comes to opposition on July 9. It will rise at 9:40 pm (CST) and cross the meridian at 1:30 am. Jupiter shines at magnitude -2.7 and will show a 47" disk in the eyepiece. Jupiter will be well placed for the summer star parties, but very low in the south from northerly latitudes. I can hardly wait for SSSP, where it will sit 18 degrees above the horizon!

**Saturn** is still well situated for observing in our long twilight evenings. At the beginning of June, Saturn shines at magnitude 0.7 and will show you a 17.5" disk in the eyepiece. It sets just after 2:00 am, so is pretty low in the western sky by the time you can see it. The rings are now tilted up at 9.4 degrees. Next go 'round, they will be much shallower, so take a good look now! Saturn is presently at an elongation of 75 degrees, but that will decrease over the summer till its eventual conjunction with the Sun on September 3. It will not make it to the summer star parties. On July 6, a 4-day-old Moon passes below Mars and Saturn. This will make a nice photo opportunity. The pairing of Mars and Saturn will be at its closest on July 9, when the two will pass 38' apart. We don't get to see the absolute closest approach, as they set just before midnight with a separation of 42'. You will be able to see both disks in a medium-high-power view.

**Uranus** doesn't reach opposition until September 12, but it is worth hunting down at the summer star parties. It shines at magnitude 5.7, and in the eyepiece, you can see its 3.7" disk. On an evening with good seeing, the disk is crisp and quite the sight. You need lots of power to make much of it, but it is fun to see. The real challenge is to hunt for it naked eye. It is quite observable on a night of transparent skies, located just 5 degrees below the circlet of Pisces. Use binoculars to get oriented, then see if you can spot it naked eye. Uranus's moon Titania shines at magnitude 13.9, so is worth hunting for. Make up a finder chart for the time and dates you are going to search for it. The moons Ariel and Umbriel are much dimmer, at magnitudes 14.4 and 15.0, and much more challenging. Good luck!

**Neptune** comes to opposition on Aug 15. In the eyepiece, you can see its 2" blue-green disk shining at magnitude 7.8. It sits just above the eastern tip of Capricorn, and you can find it with the detail chart in the *Observer's Handbook* or in your favourite star atlas. Last summer, I successfully searched for the large moon Triton, which shines at magnitude 13.4 in my 250mm scope. You need to make up a detailed finder chart with your favourite planetarium software. I am interested in reports from observers of Uranus's and Neptune's satellites.

I first saw **Pluto** in April 1988, when its opposition was on April 30. It was located just a few degrees west of M5 at an

RA of 14h56m, and shone at magnitude 13.8. In 2008, Pluto comes to opposition on June 20 and sits at an RA of 17h59m. It is now on the opposite side of Ophiuchus and shines at magnitude 14.0. The summer star parties will be the time to hunt Pluto down. It has moved into the Milky Way and sits 2 degrees above M23. The chart in the 2008 *Observer's Handbook* has seen some improvement over prior years, showing lots of stars, but maybe at too small a scale. I would be interested in your thoughts on this. You may need a magnifying glass to use it. I will for sure! Good luck in your hunt.

## Observer's Group Notes

by Larry Scott

After a rather brutal early spring, we ended up with a string of pretty good nights at the end of April. We made it out to Sleaford April 26 and 28 and May 2 for some relatively warm, clear, bug-free nights. An added bonus of spring observing is the return of all sorts of company to the prairie nights. The continuous serenade of frogs, ducks, geese, crickets, and coyotes was a welcome change from the frigid silence of winter.

Okay, now the bad news. These warmer temperatures also bring along a crop of mosquitoes for our mid-summer viewing. July is traditionally our best month if you're interested in counting mosquitoes. Come prepared, but please be aware of the adverse effects of insect repellents. If you're applying repellents in the field, move downwind and well away from the scopes. Small droplets of insect spray in the air will eat through your expensive optical coatings. Repellent on your hands will dissolve your rubber, plastic, and painted equipment. I find it useful to carry some moistened towelettes to wipe the repellent off my palms after application. Gloves and long sleeves help as well.

Our almost-dark sky period runs from about June 28 to July 11, with the Observers Group scheduled for July 4. It never gets completely dark, but there's a couple hours after midnight when it's dark enough for some deep-sky observing. The next dark sky period will run from July 28 to August 10. Observers Group is scheduled for August 8. This is late in the dark sky period, as I'm not insane enough to schedule us for the August long weekend. (Although there's a good chance I'll be out then, as I will be on holidays and I am slightly insane).

For those looking to get a little education on observing equipment, I recommend <http://www.scopereviews.com>, a site full of reviews by amateur astronomer Ed Ting. When I first started looking for equipment, I learned (almost) everything I needed to know there.

Have a great summer, and if I don't see you sooner, I'll see you at Sleaford.

Photos by Bob Johnson

*Moon over Pleiades, April 8, 2008.  
3.2 second exposure with Canon 40D  
camera.*

*Mars in the Beehive, May 23, 2008.  
Taken with a 300mm telephoto lens.*



# The Messier, H-400 & H-400-II, FNGC, Binoc & EtU Club

**Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or 400 Herschel II, Explore the Universe, or 35 Binocular objects and earn great OBSERVING CERTIFICATES!**

## MESSIER CLUB

### Certified at 110 Objects:

R. Huziak, G. Sarty, S. Alexander, S. Ferguson, D. Jeffrey, D. Chatfield, B. Christie, K. Noesgaard, M. Stephens, B. Hydomako, T. Tuomi, L. Scott, G. Charpentier, B. Johnson, M. Clancy, L. Dickson, Brent Burlingham

Donna-Lee May	Done!	110
Ken Maher		109
Ron Waldron		105
Norma Jensen		100
Brent Gratias		96
Mike Oosterlaken		93
Lorne Jensen		89
Kthleen Houston		85
Margo Miller		77
Wade Selvig		75
Garry Stone		57
Ellen Dickson		30
Jeff Swick		24
Barb Wright		23
Brian Friesen		15
Bruce Brandell		5
Katelyn Metanczuk		4



## FINEST NGC CLUB

### Certified at 110 Objects:

R. Huziak, D. Jeffrey, G. Sarty, D. Chatfield, T. Tuomi

Larry Scott	Done!	110
Scott Alexander		97
Bill Hydomako		55
Sandy Ferguson		23
Mike Oosterlaken		20
George Charpentier		13
Ken Maher		10
Mike Clancy		7

## Chatfield BINOCULAR CERTIFICATE

### Certified at 35 Objects:

M. Stephens, T. Tuomi, M. Clancy, R. Huziak, K. Maher

Brent Gratias	Done!	36
Mike Oosterlaken		32
Anna Clancy		24

The Binocular List will be available at each general meeting or can be mailed out on request to distant members.

On-line Messier and Finest NGC lists, charts and logbooks – check out:

<http://www.rasc.ca/observing>

On-line Herschel 400 List – check out the official site at:

<http://www.astroleague.org/al/obsclubs/herschel/hers400.html>

## One May Night Alone at Sleaford

I was out at Sleaford in early May when the moon was a sliver in the west. Being moon-mad, I spent an hour walking along the terminator. Then, as it turned to gold and began to sink, I started to look about the darkening sky. What should I explore tonight? Deciding to look at objects near the zenith, I began to look for some NGCs in Ursa Major. I spent the late evening contentedly sharing space with waterfowl murmuring across the road, low-flying geese, and a nearby coyote group

Sometime before midnight, a half-ton truck and three youths, beer in tow, came in for a visit. Someone (us apparently) had trained them to douse their lights while coming onto the Observatory property.

## EXPLORE the UNIVERSE

### Certified for Certificate:

M. Clancy, T. Tuomi, K. Maher, B. Gratias  
Katelyn Metanczuk 15

## HERSCHEL 400 CLUB

### Certified at 400 Objects:

D. Jeffrey, R. Huziak, D. Chatfield

Tenho Tuomi	Up!	333
Gord Sarty		251
Scott Alexander		117
Mike Oosterlaken		68
Sandy Ferguson		18

## HERSCHEL 400-II CLUB

### Certified at 400 Objects:

Darrell Chatfield 304  
Rick Huziak 211

The Messier & Finest NGC lists can be found in the *Observer's Handbook*. The Explore the Universe list is available on the National website.

by Norma Jensen

They had just finished seeding for the night, and seeing the red light on, came in.

I stopped what I was doing and began to tour them through the night sky: M13, Epsilon Lyrae, Albireo in Cygnus, and M51 in Canes Venatici. But it was Saturn they wanted to see again and again.

Seeing that they had clearly settled in for the duration, I finally had to say that I was packing it in for the night. Off they went with a promise to come another time. All live on neighbouring farms. Happy to have made their acquaintance.