

# Saskatoon Skies

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

Vol. 36, No. 6

June 2005

## SSSP 2005 coming up fast



This picture of telescopes from the 2004 Saskatchewan Summer Star Party is to remind you to send in your registrations for the 2005 Saskatchewan Summer Star Party which will be held August 4-7 at Cypress Hills. Register by July 15 for a discount. See inside for more details.

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### Saskatoon Centre

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# Membership? It's never too late to join!

**Regular: \$58.00/year   Youth: \$31.25/year   Lifetime: \$1000**

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** (bimonthly)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- 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 fax 306-659-2170.

## About this Newsletter...

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*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 – preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached .JPGs (.GIFs also accepted). Send e-mail submissions to the editor at <[tuomi@sasktel.net](mailto:tuomi@sasktel.net)>. Please send articles in "generic" formats with simple formatting – one tab at the beginning of paragraphs, one space after commas and periods. A separate by-mail subscription to *Saskatoon Skies* is available for \$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.

## Saskatoon Centre's main officers:

**President** – Ron Waldron  
**Vice-President** – Garry Stone

**Secretary** – Al Hartridge  
**Treasurer** – Norma Jensen



**Light Pollution Abatement website at:  
[www.ras.sk.ca/lpc/lpc.htm](http://www.ras.sk.ca/lpc/lpc.htm)**

## 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

  
**Bottle Drive & Canadian Tire \$**  
by Darrell Chatfield

Canadian Tire Money donations of \$13.00 from Ellen D. and \$2.25 from Barb added to our fund raising efforts. Thanks to all contributors. Please bring your bottles and Canadian Tire Money to the General meetings. I will collect them after the meeting concludes. If you cannot make it to the meeting but would like to contribute, please call me at 374-9278.

DATE	EVENT	CONTACT	TELEPHONE
June 3	<b>Oberservers Group</b> – Sleaford Observatory	Bill Hydomako	384-4781
June 20	<b>Executive Meeting</b> – 6:30 p.m., 175 Physics, U of S	Ron Waldron	382-9428
June 20	<b>General Meeting</b> – 7:30 p.m., 175 Physics, U of S – <b>Cataclysmic Variable Stars</b> , by Gord Sarty; <b>Solar Filters</b> , by Jeff Swick; <b>Astronomy Games</b> , by Ken Maher	Ron Waldron	382-9428
June 30-July 4	<b>Stargazing Manitoulin</b> – Manitoulin Island, ON – <a href="http://www.gordonspark.com/astronomy.html">www.gordonspark.com/astronomy.html</a>		
July 1 or 2	<b>Oberservers Group</b> – Sleaford Observatory	Bill Hydomako	384-4781
July 7-10	<b>Alberta Star B-Q</b> – Eccles Ranch Obs. Caroline, AB – <a href="http://www.syz.com/rasc/starbq2005.htm">www.syz.com/rasc/starbq2005.htm</a>	Roland Dechesne	(403) 246-4498
July 30-Aug. 7	<b>Mt. Kobau Star Party</b> – Osoyoos, BC	Jim Failes	(250) 763-6962
Aug. 4-7	<b>Saskatchewan Summer Star Party (SSSP'05)</b> – Cypress Hills Inter-provincial Park, <a href="http://www.usask.ca/psychology/sarty/rasc/starparty.html">www.usask.ca/psychology/sarty/rasc/starparty.html</a>	Les Dickson	249-1091
Aug. 11-14	<b>Manitoulin Star Party</b> – Manitoulin Island, ON – <a href="http://www.gordonspark.com/astronomy.html">www.gordonspark.com/astronomy.html</a>		
Aug. 12	<b>Noctilucent Cloud Season ends</b>		
Sept. 1-4	<b>Alberta Star Party</b> – Eccles Ranch Obs. Caroline, AB – <a href="http://www.syz.com/rasc/asp2005.htm">www.syz.com/rasc/asp2005.htm</a>	Roland Dechesne	(403) 246-4498
Sept. 9-11	<b>Northern Prairie Startfest</b> – Black Nugget Lake, AB – <a href="http://edmontonrasc.com/nps.html">http://edmontonrasc.com/nps.html</a>	Warren.Finlay@ualberta.ca	

**MEETING!!**

**Monday, June 20, 7:30 PM**  
**Room 175 Physics, U of S**

Presenting:

**Cataclysmic Variable Stars:  
 From SS Cygni to Supernovae**  
 by Gord Sarty

**Baader Solar Filters**  
 by Jeff Swick

**Astronomy Board/Card  
 Game Opportunity**  
 by Ken Maher

## Saskatoon RASC Web Page Relocated

The computer currently hosting the RASC Saskatoon web pages will be scrapped this summer. So the RASC web pages have been moved to:

<http://www.usask.ca/psychology/sarty/rasc/>

The pages at the old location are still there but will be replaced by a re-direction page soon; that page will disappear when the host computer does.

– Gordon Sarty

## BOOKS FOR SALE

by Bruce Brandell, Sales Coordinator



Some of the items are left from the Star Party. All will be available at our next meeting on June 20/05.  
 Call 249-1119, or email <[bruce\\_brandell@yahoo.com](mailto:bruce_brandell@yahoo.com)>

Title	Author	No. Avail.	Price Cdn\$
Calendar, RASC 2005	Rajiv Gupta, Editor	1	\$ 5.00
Messier Cards, laminated	Sky Publishing	4	\$ 6.00
Messier Poster, colored	Sky Publishing	2	\$20.00
Milkyway Poster	Sky Publishing	2	\$25.00
A Short History of Nearly Everything	Bill Bryson	3	\$17.00
The Moon Map	Sky Publishing	1	\$15.00
The Mars Map	Sky Publishing	1	\$15.00
Astrophotography	G.N. Patterson	27	\$ 5.00
RASC Centennial Mug			\$ 8.00
RASC Stickers, blue or white			<b>NEW!</b> \$ 1.00
Pins SSSP 2004		14	\$ 5.00
Pins SSSP 2003		2	\$ 4.00
Pins SSSP 2002		lots	\$ 4.00
Pins SSSP 2001		lots	\$ 4.00

## SKY BUYS & MIRROR CELLS

THE SASKATOON CENTRE'S SWAP AND SALE PAGE!

### For Loan to Members:

Slide set for talks on general astronomy and light pollution.  
 You can borrow this set any time you want to give a talk to your favourite group.

Contact Rick Huziak at 665-3392.

## **Minutes of the EXECUTIVE MEETING**

May 16, 2005, 6:30pm – Rm 175 Physics, U of S

1. Approval of Minutes: of previous meeting. Moved by Les Dickson and seconded by Rick Huziak and carried.
2. **Treasurer's Report:** Norma Jensen reported a profit of \$751.25 from recent steak night.
3. **General Assembly 2005:** Les Dickson will represent our Centre at the next GA. He is aware of the Centre's opinion regarding the proposed fee split changes by National and will convey this opinion for the Centre.
4. **Events Committee:** Jeff has purchased Baader solar filter film for the Centre which will be sold to Centre members.
5. **Fundraising:** Darrell mentioned there has been some hold-up in getting the license for the raffle. Prizes to be won are a portable day trek DVD player, a Cannon A510 digital camera and a Schrimshaw print.
6. **SSSP:** The resort has allowed the centre to hold unbooked rooms with no deposit. Les showed the SSSP display which will be used at the upcoming GA meeting.
7. **Sask. Light Abatement Committee:** Norma Jensen has joined the committee. Rick will make a presentation at the Park Interpreter's workshop at Blackstrap. There is also a meeting tomorrow with SaskPower at which a New York group will be presenting.
8. **Video tapes:** The feasibility of making video tapes of our meetings and posting on the web was discussed.
9. Meeting adjourned at 7:45 p.m.

## **Minutes of the GENERAL MEETING**

May 16, 2005, 7:30pm – Rm 175 Physics, U of S

1. Approval of the minutes of the previous meeting. Moved by Les Dickson and seconded by Ellen Dickson and carried.
2. **Highlights of the executive meeting:** presented by Garry Stone.
3. **Presentations:**
  - Ken Maher – Astronomy Software for Linux.
  - Rick Huziak – When focus sharpens up.
  - Norma Jensen – Starting in Astronomy.
  - Les Dickson – The exhibit for the upcoming GA meeting.
4. Meeting adjourned at 9:07 p.m.

## **Fund Raising Dinner – April 30/05**

**by Norma Jensen**

Special thanks to Sharon Hartridge, Barb Wright, Ellen Dickson and Norma Jensen for contributions to the silent auction. Thanks to Christine Kulyk and the Awasis committee for door prizes.

<b>In</b>	<b>\$1151.25</b>	Meal 694.25, Wine basket 108.00, Silent auction 260.00, 50-50 Draw 37.00, Donations 52.00
<b>Out</b>	<b>\$400.00</b>	Meal charge 369.25, Wine basket 30.75 [cards and tickets]
<b>Profit</b>	<b>\$751.25</b>	

Winners – RASC Saskatoon and the Sleaford Projects: **Jim Wood, 50-50 draw / Barb Wright, wine basket**

This fundraising event was a success thanks to the support of RASC members, their families and friends.

**Newsletters from Other Centres...** Hello all. Here are the newsletters that have been received for the past month by your Central Mailer. *Darrell Chatfield* is the new librarian and he can arrange a time to go to the library. This is to let you know what is available and what other Centres have been doing. — Ellen Dickson, Central Mailer

- |            |   |
|------------|---|
| May/05     | <ul style="list-style-type: none"> <li>• Stardust (Edmonton Centre) – "My Australian Dark Sky Observatory"</li> <li>• The StarSeeker (Calgary Centre) – "Member Names Asteroid Recognizing Alberta's Centennial"</li> </ul>   |
| Mar/05     | <ul style="list-style-type: none"> <li>• Nova (Vancouver Centre) – "Stars in Hawaii", "From the Librarian: Top 12 For Beginners"</li> </ul>   |
| Feb/05     | <ul style="list-style-type: none"> <li>• Saskatoon Skies (Saskatoon Centre) – "Lowest Object", "Seeing the Light in Light Pollution"</li> <li>• The StarSeeker Classic (Calgary Centre) – "New CSC Observing Deck Coordinator Needed"</li> <li>• Stardust (Edmonton Centre) – "In Search of Darkness", "Canadians on the Moon"</li> </ul> |
| Jan-Feb/05 | <ul style="list-style-type: none"> <li>• Nova (Vancouver Centre) – "The Night Sky", "Done Died and Gone to Space Heaven!"</li> </ul>  |
| Jan/05     | <ul style="list-style-type: none"> <li>• Stardust (Edmonton Centre) – "A Crisp, Cool Reappearance", "Making Celestial Diagrams with a Typewriter"</li> </ul>  |

# An Evening with the Stars



by Mike Clancy

It had all been laid on; Rick Huziak had been approached by his contacts at SERM (Saskatchewan Environmental Resource Management) to pass some of his knowledge and enthusiasm about Dark Sky Preserves and the starry sky in general on to a group of young people training to be the Parks Visitor Programs staff at many of our provincial parks this coming summer. All he needed was someone else from the club to help with the ‘eyes-on’ part of the session. As I’m very interested in the provincial parks just now, it seemed like a golden opportunity to meet some of the people I would hopefully be seeing in my travels this summer. I agreed to join Rick at Cedar Lodge on Blackstrap Lake, sitting on the hilltop just past the provincial park entrance. I got there about 2100 hrs 10May05, just in time to hear the end of a talk on astronomy activities by the organizer, Ms. Joan Hodgins of the Cypress Hills Inter Provincial Park.

There were about 35 people in attendance, all of whom had just been given training on a very useful activity booklet entitled “Tell-A-Star” which ‘celebrates the dark night sky in Saskatchewan’s Land of the Living Skies’. I won’t go into it in detail, but it has several tools for showing a wide variety of ages how to enjoy the night sky, including a simple but effective star wheel you can make from the pages! Armed with this information, Rick’s talk on preserving the night sky was well received, as was his slide show of various things astronomical. After his session, a short recess was called while Rick and I set up in front of the resort, facing west across the lake (about an hour after this picture was taken). This cut a large portion of the eastern sky out for us, but we had little extraneous light which was the main reason that particular site was chosen. I’d brought my 114 EQ shorty and the 90 mm Maksutov-Cassegrain while Rick had his famous 10” Dob and a box of 7x35 binoculars he’d borrowed from Brightwater Camp for his binocular viewing session.

The viewing began in near-perfect conditions, about -7 C, few clouds and no wind. I set the shorty up to view Jupiter and her moons while Rick looked at Saturn (to the usual chorus of “ooohs”), and I set the Maksutov on the moon to catch clear views of the Theodosius-Cyrillus-Catharina complex of lunar craters just at the terminator. After folks had settled into the viewing mode and their eyes had night-adjusted, Rick handed out the binoculars and gave a very good half-hour guided tour of the available constellations and some of the easier objects. I took the opportunity to set up the shorty on the Perseus double cluster, allowing folks a closer look at one of the very things they’d found during their binocular tour. Most people thought that our equipment would be very expensive and were more than a little surprised to hear Rick made his own while my compact Mak cost less than \$200; they were even more impressed with just how much could be seen with simple binoculars. Having three types of scope there allowed them to sample different magnifications and views, which was of practical interest.

We kept at it until about 2330 hrs after which the crowd began to thin out although the questions did not. Rick skillfully handled things as diverse as star color and the existence of black holes while I answered questions on lunar crater formation and star clusters. I made it home about midnight, cold but somewhat refreshed by the eagerness to learn seen in these park interpreters. I felt they would be better able to use the evening’s learning in their own park programs than would have been the case had we not been there. Many thanks to Joan for inviting the Saskatoon center RASC to speak to them, and thanks also to Rick for allowing me to help out; I enjoyed it as much as the audience did!

# Best Power for Observing Faint Galaxies

by Tenho Tuomi

On one of the two nights in May that were fit for observing I was checking off several 11th magnitude galaxies in Virgo and Ursa Major from the Herschel 500 Club list. I had heard that more power helps to see better but that night I found that I could find the galaxies easier at 49 power with my 25 mm eyepiece than at 81 power with my 15 mm eyepiece, with my 8 inch Meade Starfinder Newtonian. This led me to investigate why this would have been so.

The RASC Observer's Handbook 2005 has a good section on page 49 on Magnification and Contrast in deep-sky Observing. Sky brightness and surface brightness of objects is measured in magnitude per square arcsecond (MSA). The surface brightness of galaxies can be found by looking at their descriptions in planetarium programs such as WinStars. Most of the 11th magnitude galaxies I was looking at that night had a surface brightness of 13.8 mag/arcmin<sup>2</sup>, or 22.7 mag/arcsec<sup>2</sup>. Small dimension of most of these galaxies was 4 arcminutes.

Putting these values into the table for Threshold Surface Brightness for Size and Sky Brightness, and assuming a dark country sky with MSA of 22, I found that:

- At 50 power the exit pupil with my 200 mm telescope is 4 mm which according to another table dims the objects by 1.2 mag to 23.9 and the sky to 23.2. The object size increases to 200'. From the table the threshold brightness is about 24.6, which gives a margin of 0.7 mag.
- Doubling the power decreases the exit pupil to 2 mm and decreases the object's surface brightness by an additional 1.5 mag to 25.4, and the sky to 24.7. The object size would also double to 400'. From the table the threshold brightness now is 25.8, which gives a margin of 0.4 mag.

The brightness threshold margin is larger at 50 power than at 100 power. It was nice to see that theory agreed with my observation that 49 power was better than 81 power for finding these objects with my telescope that night.

## Renewing Your Subscription

by Mike Clancy

As a service to all my esteemed colleagues in the Saskatoon Center RASC, I am offering this summary of how to best renew your subscription to this worthy organization. First, you can send me your membership fees, currently \$58 per year, \$1000 for a life time membership. Youth members (those in University or College, or under 18 years of age) can renew for \$31.25 per year. Those wishing to receive newsletter subscriptions only can pay an annual fee of \$20 for 11 issues per year (July and August newsletters combined); such a subscription does not carry with it the rights and privileges of a full member, though – just the newsletter. Those sending me your renewal should make the cheque payable to the RASC. Note: if you make the cheque payable to RASC – Saskatoon Center, we must first cash it then send National Office a cheque; better to send it directly cashable in their hands. Mind you, if you're going to mail a cheque you might just as well mail it directly to the national office at:

Royal Astronomical Society of Canada  
136 Dupont Street  
Toronto, ON M5R 1V2

You can also renew directly over the internet from the National Office webstore at <http://www.rasc.ca>. You'll find they are quite efficient, and will also gladly sell you whatever paraphernalia and regalia you'd like to complete your appearance in office or around the town. This, by the way, is the method I use to renew my own membership, and I highly

recommend it for those with internet savvy and capability. All you need is a computer and the trust to use your credit card over the RASC's secure website!

Just a note to let you know, but what I've been doing recently is giving errant members 3 month's grace before removing their names from our membership list. Even then, your name gets put in a sort of "holding pen" as it were, so that I can retrieve your data quickly should you suddenly decide to renew or the postal system suddenly unearths your cheque (whichever – I'm not here to judge!). What I suppose I could do is mercilessly hound delinquent members until they, in exasperation, pay up while muttering under their collective breath. I have chosen not to do so as I believe we're all adults and besides, National Office sends out their own notices so why should I duplicate the effort? By and large people get their subscriptions paid up in good order, and I don't want to upset Universal Karma with any bad vibes! Oh, by the way, I also keep members' records as up to date as I can, but errors sneak in whenever the computers' circuits get bored so please let me know of any errata and I'll make the necessary changes. While you're up off the couch and wandering over to the scope, get the neighbours over and show them the wonders of the universe then get them to fill out a temporary membership. It costs them nothing whatsoever, and it gives me something to do to justify the huge salary I get for this job ... Oh, wait a bit – I'm a volunteer! Oh, well!

# Telescope Notes

by Tenho Tuomi



A year ago Garry Stone's homemade telescopes were displayed on page 5 of the May 2004 newsletter. Since then Garry built and added another wooden telescope to his collection. This one is a 90mm/1300 fl refractor that he put together in July 2004 in time for the Saskatchewan Summer Star Party at Cypress Hills where this picture was taken. He put the previous 80mm/560 fl wooden refractor on it for a finderscope. The 90 mm long focal length, air-spaced objective was a high quality research grade objective from Sky Instruments in Vancouver.

Garry finds that it is even better than the 120 mm SkyWatcher refractor, as he said, "I could see more detail in the crater Maurolycus with it – almost as clear as with the C8. And no noticeable colour problems."



The other telescope maker this winter was Bill Hydomako. In December he found a source of surplus 63 mm refractor assembly sets for \$35.00, or \$41.00 with a right-angle prism, and several of us placed orders through him. Later on Bill arranged for some locking rings to be made for the objectives. Here is a picture of the one I bought, made into a finderscope for my 8 inch Meade Newtonian. Garry Stone made the wooden eyepiece adapter/holder on his lathe, and the adjustable metal rings. I like to use the finder with a correct image right-angle prism. Any concerns I had about the 14 power, 3.5 degree width field being too narrow for star hopping were quickly washed away. Pictures taken through the finderscope show the images to be of good quality. This was a welcome enhancement to my telescope for my Herschel object hunting.

## Free Star Atlases from [RASCals]

by Terry N. Trees

Here are a couple of free star atlases you can download from the Internet and print out. Then maybe make notes on them for observing projects, etc. Keeps your expensive ones out of the dew.

[http://www.cloudynights.com/item.php?item\\_id=1052](http://www.cloudynights.com/item.php?item_id=1052)  
<http://www.asahi-net.or.jp/~zs3t-tk/atlas/atlas.htm>



## The Planets This Month, June 2005

by Murray D. Paulson, Edmonton Centre

In the season of twilight, it is nice to have a few planets to grace the optics from time to time. Did you notice Saturn as it slipped away into the twilight glare, or Venus creeping up into the evening sky? I had predicted Venus would be visible by early May, and I saw it for the first time this apparition through my son's bedroom window on May 1st. You needed binoculars to catch it in the sky glow, but it was there, a gleaming white beacon in a tangerine sky.

The month of June starts off with **Mercury** passing the sun and heading to the finest conjunction in over 6 months with Venus. What a year, two fantastic Venus-Mercury conjunctions, maybe the best in my lifetime, in just one year. On closest approach, which is on June 27th at 10:15 am local time, they pass only 3.8 arc minutes apart, something you should not miss! I will phone in sick to work. Of course this is a daytime observation, but just after sunset, you will be able to catch them in the twilight with binoculars. They will separate to 9.7 arc minutes, but still an incredible sight. The pair will set at 11:30 pm, an hour and 25 minutes after the sun. On the evening of June 26th, they will sit 8.8 arc minutes apart in evening twilight. At the time Venus will be 10.9" in diameter gibbous disk shining at magnitude -3.9 and Mercury near its greatest eastern elongation will present a 62% illuminated quarter phase of 6.5" and shines at magnitude 0.0. Unlike last January's long lingering conjunction, the pair of inner planets rushes past each other, and only are less than a degree apart for one week. The week starts on June 24th and ends on Canada day. Look for them as a vestige in the fireworks.

Mercury proceeds on from this lovely evening apparition to its greatest eastern elongation on July 8th when it will be 26.25 degrees from the sun. It will present a 41% illuminated, 8" fat crescent at the time and shines at magnitude 0.5. On this same night, Venus is 2 degrees above Mercury and a 2.4 day old crescent moon joins 3 degrees above Venus to form a fine trio. Unfortunately, the ecliptic has become shallower as this apparition has progressed, and this last sight will be difficult. Over the next month, Mercury slides into the twilight glare and finds itself in conjunction below the sun on August 5th. But with Mercury's amazing speed, it swings out to its next morning elongation by August 23rd when it will sit 18.4 degrees from the sun and it shines at magnitude -0.5.

**Venus** has been making ground into the evening sky even as the ecliptic turns down and lowers it into the glare. Its disk slowly grows over the summer, but it remains a magnitude -4

beacon in the twilight. On August 7th, a 2.75 day old crescent moon approaches Venus in the early twilight and occults it for locations like Whitehorse or Alaska. In the eyepiece it now has grown to 12.8". As the summer deepens, so does the tilt of the evening ecliptic, and Venus stays in the evening twilight. Glimpsed only by the ardent watcher.

**Mars** is on its comeback for the next great apparition this fall. For the late night / morning observers, the red planet has made its way up into the sky. At the beginning of June, Mars sits near the circlet of Pisces and shines at magnitude .2 and shows a 8.2" gibbous disk. Over the next month, the red planet moves into the "V" of Pisces and sits just above Mira, another very red object in the night sky. By early August, Mars now shines at magnitude -0.5 and will show a 11.6" disk in the eyepiece. Get out your web cam and start shooting. This will be a great apparition! By the end of August, Mars now has moved to the constellation of Aries, and shines at magnitude -1.0. In the eyepiece the disk has expanded to 13.8". There is now a lot to see on the planet. It rises at 10:30 pm and it crosses the meridian at 6:00 am at an altitude of 36 degrees. It will be nice to see it back.

As Mars returns, **Jupiter** is making its way to its curtain fall. Enjoy June and July, Jupiter is sliding down into the twilight.

**Saturn** has disappeared for all intents and purposes, but for those bent on a challenge, check out the close conjunction of Venus, Mercury and Saturn when the three sit within a 1.5 degree circle on the evening of June 25th. You will need optical aid to find the fainter two of the group. Saturn shines at magnitude 0.2, with Mercury in at -0.1 and Venus bringing up the front at magnitude -3.9. How often do you get to see grouping this tight? It is certainly worth setting up a scope to find them all.

As we move out into the outer solar system, we run into Neptune, which sits at opposition on August 8th in Capricorn, and Uranus, which is at opposition on August 31 in mid Aquarius. Neptune can be found with one of the charts from the Handbook, or from the popular magazines. It shines at magnitude 7.8 and if the seeing is dazzling, you can see its 2.4" bluish disk. Uranus is naked eye at magnitude 5.7 in a good dark sky location. Once again, take along a good chart to find it. It will be by no means obvious! It has a 3.7" bluish disk, which is easy on a night of good seeing. At the Kobau Star

*continued on next page*

## The Planets this Month continued

party and the SSSP, Uranus transits just after 3 am, and sits 31.5 degrees above the southern horizon. This is a great place to get your best look at it. If the seeing is really good, crank up the power and enjoy the view. If you plan on this for the star party, print off a few Neptune and Uranian moon finder charts and hunt down the brighter moons. Great challenge objects. See me if you are interested in obtaining copies. I know Dennis Boucher has the outer planet finder charts posted on his website. I believe that he uses Guide to create them.

Last on my list is **Pluto**, which I have found is a lot easier at the summer star parties. You can't dally on it because it sets pretty early, but you are so much farther south that the task is made easier. Once again, use a good finder chart. I don't recommend the chart in the Handbook, so try the one in Sky and Telescope magazine, Astronomy Magazine or one generated by Guide. I haven't missed a year yet since 1987, and it is amazing how much sky it has crossed in that time.

Enjoy the summer, and clear skies!

## SSSP 2005 Update

by Les Dickson

This is the fifth in a series of articles on the Saskatchewan Summer Star Party, to be held August 4-7 at the Cypress Hills Interprovincial Park and Dark Sky Preserve.

Ellen and I attended the GA hosted by the Okanagan Centre and held at the Okanagan University College campus over the Victoria Day long weekend. While there, we were able to advertise SSSP. I gave a slide presentation after the Friday night dinner, which gave me an opportunity to talk to a captive audience. The talk was well received. We also were offered space to set up a poster on the star party. Our poster was set up right beside the registration desk, affording excellent exposure. Our thanks to Alan Whitman, Guy Mackie and the rest of the GA team from the Okanagan for putting on such a well-run GA, and for letting us advertise our star party.

I heard from Alan Dyer that Ivan Semeniuk will be arriving at SSSP on Thursday, which means he might be in time for our wiener roast. Alan has graciously offered to drive Ivan from the Calgary airport to SSSP, and return him to the airport on Sunday. Many thanks to Alan!

The Star Party is now fast approaching: we have only two months to go. The organizing committee will be meeting more frequently, perhaps every two weeks, to ensure everything goes without a hitch. As usual, we ask that anyone from our Centre that is going to the star party to volunteer some of their time at SSSP to help us with all the small jobs that have to be done. Please call me at 249-1091, Bill Hydomako at 384-4781,

or Rick Huziak at 665-3392 if you would like to volunteer or would like some more information.

For more information, you can contact Les Dickson, or our Registrars at:

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Saskatoon, SK S7L 6J3  
Phone (306) 384-4781  
email: [wm.hydomako@sasktel.net](mailto:wm.hydomako@sasktel.net)

You can also visit our web site at:

[www.usask.ca/psychology/sarty/rasc/starparty.html](http://www.usask.ca/psychology/sarty/rasc/starparty.html)



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The Messier & Finest NGC lists can be found in the *Observer's Handbook*. The Explore the Universe list is available on the National web site. The Herschel 400 list is available at the web site listed below. The Binocular List will be available at each general meeting or can be mailed out on request to distant members.

**On-line Messier List** – For those who'd like an electronic Messier list (with DSS images), check out:

<http://www.seds.org/billa/dssm/messier.html>

**On-line Finest NGC List** – For those who'd like an electronic FNGC list, check out the Edmonton Centre's version at:

<http://www.edmontonrasc.com/catalog.html>

**On-line Herschel 400 List** – For those who'd like an electronic Herschel 400 list, check out the official site at:

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



## RASC Observing Group Notes

by Bill Hydomako, Observing Group Coordinator

Hi all Saskatoon Centre Observers. Well, the Observing Group night(s) was a wash again for the month of May. The weather is just not cooperating for us. I hope the June's observing session is a go. I have planned a walk down the Milky Way. I think that I will repeat this one for the next session that I'm going to set for July 1 and/or July 2. I'm not going to be in town the following weekend as it's the Aberta Star-BQ but don't let that stop anyone from going out to observe anyway.