Saskatoon Skies

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

Vol. 36, No. 11 **November 2005**

Sleaford Open House, October 29

Thank you for all the volunteers who came to help at the Sleaford Open House in October, and especially thank you for the ones who brought food for the club barbecue. See inside for more pictures.

In This Issue:

Saskatoon Centre
The Royal Astronomical Society of Canada
P.O. Box 317, RPO University
Saskatoon, SK S7N 4J8

WEBSITE:
www.usask.ca/psychology/sarty/rasc
E-MAIL: rmwaldron@shaw.ca
TELEPHONE: (306) 382-9428

MEMBERSHIP? IT'S NEVER TOO LATE TO JOIN!

Regular: $65.00 /year Youth: $34.25 /year Lifetime: $1100

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.*

SASKATOON CENTRE'S MAIN OFFICERS:

President – Ron Waldron
Secretary – Al Hartridge
Vice-President – Garry Stone
Treasurer – Norma Jensen

BOTTLE DRIVE & CANADIAN TIRE $

by Darrell Chatfield

$13.35 in Canadian Tire Money received from Jim Wood. Thank you very much. The total collected to date is $65.60. 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.

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**

LIGHT POLLUTION ABATEMENT WEBSITE AT: www.ras.sk.ca/lpc/lpc.htm

About this Newsletter…

Newsletter Editors – Tenho Tuomi, Ken Maher **Copy** – Rick Huziak **Collate** – Walter Essar, Jim Young, 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 – 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>. 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.

RASC CALENDAR OF EVENTS

Date	*Event*	*Contact*	*Telephone*
Nov. 11/12	**Saskatoon Hobby Show**	Jeff Swick	373-3902
Nov. 16/17	**Leonid Meteor Peak** (full moon interferes)	Rick Huziak	665-3392
Nov. 21	**RASC Executive Meeting --** 6:30 p.m., 175 Physics, U of S	Ron Waldron	382-9428
Nov. 21	**RASC General Meeting --** 7:30 p.m., 175 Physics, U of S – **CCD Colour Imaging,** by Chris Mack; **Education Outreach - The Brightwater Connection**, by Ron Waldron	Ron Waldron	382-9428
Nov. 25	**Prince Albert Public star night**: meet at 7 p.m., for gravel pit	Kathleen Houston	922-8836
Dec. 2	**Observers Group** -- Sleaford Observatory	Rick Huziak	665-3392
Dec. 12	**RASC Executive Meeting --** 6:30 p.m., 175 Physics, U of S	Ron Waldron	382-9428
Dec. 12	**RASC General Meeting --** 7:30 p.m., 175 Physics, U of S	Ron Waldron	382-9428
Mar. 11	**Fundraising Dinner**	Norma Jensen	244-7360
Apr, /06	**George Moore's Astronomy Workshop** – Edmonton Centre	tbd	tbd

MINUTES OF THE EXECUTIVE MEETING October 17, 2005

1. Meeting brought to order at 6:30 p.m.
2. Minutes of previous meeting accepted as read, moved by Rick Huziak, seconded by Bruce Brandell and carried.
3. Election Slate: presented by Ron Waldron. Moved by Ron Waldron and seconded by Mike Clancy and carried that the position of Mail Coordinator be added to the executive. Ellen Dickson was appointed to this position.
4. Treasurer's Report: $7500.00 in chequing account.
5. Hobby Show: will set up a double booth this year at a cost of $220.00. Show will be on November 11th and 12th.
6. Sleaford Open House: will be held Oct. 28 and 29. There will be a barbeque for those interested at 4:30 p.m. Saturday.
7. Insurance: No change in broker (Saskatoon Agencies). Moved by Norma Jensen, seconded by Ellen Dickson and carried.
8. Events Committee: Jeff Swick stated that the Lakewood event has been canceled. Encouraged members to post posters advertising the open house at Sleaford. There will be advertising in the Watrous paper. There are possible interviews on CTV and Global.
Motion by Jeff, seconded by Jim Young and carried that the club purchase kits for the lunar observing program from Bonnie at National.
9. Fundraising: Darrell has raised $313.00 through bottle drive. The recent raffle has netted $1134.00.
10. Membership: Mike Clancy stated that there are presently 77 members but 11 are in dues default.
11. Sleaford: no observing lately. Bill, Rick, and Darrell have recently installed a new exterior door on bathroom.
12. SSSP 2005: Barb mentioned that we just barely broke even financially at this year's event.
13. DVD: Motion by Rick Huziak, seconded by Les Dickson and carried that Jeff be allowed to purchase a DVD for the centre for $26.75.
14. Meeting adjourned at 7:30 p.m.

MINUTES OF THE GENERAL MEETING OCTOBER 17, 2005

1. Meeting brought to order at 7:30 p.m.
2. Approval of Minutes: moved by Mike Clancy, seconded by Rick Huziak and carried
3. Election of Officers for 2005/2006. Bill Hydomako wished to withdraw his name as Observing Coordinator.
4. Hobby Show: November 11th and 12th. Volunteer sheet passed around.
5. Sleaford Open House: Oct.28th and 29th. Barbeque at Sleaford on Saturday, before the Open House starting at 4:30. Bruce Brandell will be at the field house on Friday to lead the convoy out to Sleaford.
6. Presentations:
   - Gord Sarty: A Personal Australian Star Party.
   - Rick Huziak: Traveling Saskatchewan and Alberta in the Name of Dark Sky Parks and Star Parties.
   - Al Hartridge: Webcam Astrophotography of Mars.
7. Library: Darrell has started cleaning up and reorganizing the library.
8. Meeting at 9:50 p.m.

Uncertain what to buy for Aunt Emily or your cousin for Christmas?

Why Not Buy a $20.00 gift certificate to J.D.Peppercorns restaurant in Saskatoon?

Half the ticket cost goes to RASC.

Certificate sales at Nov. and Dec. meetings. Or e-mail Barb wrightb@sasktel.net

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. Call 249-1119, or email bruce_brandell@yahoo.com

Title	*Author*	*# Avail*	*Price*
Calendars			
RASC 2006	RASC	14	$14.00
Skywatcher's	Stan Shadick	12	$14.00
Books			
The Backyard Astronomer's Guide	Dickinson & Dyer	3	$45.00
Nightwatch	T. Dickinson	2	$27.00
Night Sky Atlas	R. Scagell	3	$27.00
The Moon Observer's Guide	P. Grego	3	$13.00
The Sun Observer's Guide	P. Spence	1	$13.00
Firefly Astronomy Dictionary	Firefly	3	$13.00
Exploring the Sky by Day	T. Dickinson	1	$9.00
Skyways – Astronomy Handbook for Teachers	M.L. Whitehorne	5	$20.00
The Beginner's Observer's Guide	L. Enright	4	$19.00
Astrophotography	G.N. Patterson	lots	$5.00
Charts			
Milkyway Poster		1	$25.00
The Moon Map		1	$15.00
The Mars Map		1	$15.00
Miscellaneous			
RASC Centennial Mug		6	$8.00
RASC Stickers, blue or white		lots	$1.00
SSSP 2001 Pin (Summer Triangle)		lots	$4.00
SSSP 2002Pin (Comet)		lots	$4.00
SSSP 2004 Pin (Moose)		2	$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.

For Sale: One Concord 60 mm x 900 mm focal length refractor on an equatorial mount, complete with finder scope. One Tasco 60 mm refractor (about 700 mm focal length) on an alt/az mount. Both are in new condition. Doug McMillan 382-0846.

For Sale: 10mm Speers Waler eyepiece for sale, $100.00. Anyone interested can call Bob Johnson at 955-4618, or email bjohnson53@shaw.ca

For Sale: Complete Telescope Package one year old ($2400.00 new) Sale Price $1200.00 obo – phone Guy LeBlanc at 306-665-6085 or 306-222-6883, or email g.leb@sasktel.net

Package as follows:
Sky watcher Maksutovs mak127 • EQ3-2 mount • Dual axis Clock Motor Drive (with gel battery pack & 110 volt charger) • EQ3 polar scope • 9 x 50 finder scope with adjustable mount • Case for scope • Case for EQ3 mount • Hard Case for accessories
Accessories: Sky watcher dual led light • Seven piece stargazers filter set in a case (Skyglow broadband, Variable polarizing filter, Four color filters, Plus Moon filter and Antares ND 13 filter in case) • 2x Barlow lens 1.25 • Antares 2x barlow 1.25 fully multi coated • 6mm ultra wide angle long eye relief m/c • Plossl 10mm multi coated • Plossl 25mm multi coated • Plossl 32mm multi coated • Maxview 40 multi coated eyepiece/camera adapter with Sony 45-52 adapter • 1.25 – 45° diagonal • 1.25 – 45° erect image diagonal • eye piece reliefs
Books: Night Watch 3rd edition and Backyard Astronomy Guide

MONDAY, NOVEMBER 21, 7:30 PM – ROOM 175, U OF S

Presenting

CCD Colour Imaging – by Chris Mack Astronomy 214 student Chris Mack, of St. Albert, AB will present colour astrophoto images of deep sky objects taken with the SBIG ST-9XE camera and the Meade LX-200 12" telescope from the Physics building roof.

Education Outreach - The Brightwater Connection – by Ron Waldron

Note: There will be an executive meeting at 6:30 p.m.

SLEAFORD OPEN HOUSE REPORT, OCTOBER 28/29

by Tenho Tuomi

Astronomy Club's dome on the left with warmup shelter behind it. University of Saskatchewan's sliding roof observatory on the right.

Friday evening was clouded out and very few people came, maybe only four visitors from what I heard.

Saturday's open house started with a very successful club members' barbeque at 4:30 p.m. with a table load of goodies brought by the members and their wives. A couple of barbeques were brought by the members and used to cook the hamburgers and wieners.

The evening started clear though with threatening clouds to the west and a pessimistic Clear Sky Clock forecast. Visitors started arriving in spite of the clouds already in Saskatoon and rain in Prince Albert. At least four telescopes were set up by the club members plus the ones in the U of S observatory and these were used to show Messier objects and double stars, and of course Mars, which was at its closest point to earth at this time. The sky was very clear but by 8:30 p.m. the clouds rolled over from the west leaving Mars as the only shining light in the sky. Mars kept getting better through the telescopes as the clouds thickened, for the markings on it increased in contrast and were clearly visible. After all hope of seeing more was gone everyone moved into the schoolhouse where Rick showed astronomy slides to the visitors who were still arriving. Thank you to the 16 or so volunteers who showed the stars to more than 50 guests, making this such a success.

Afternoon barbeque at Sleaford School

SASKATOON CENTRE, R.A.S.C.
ELECTED EXECUTIVE 2005/2006

President - Ron Waldron (2nd year)
Vice-President - Garry Stone (2nd year)
Past President - Richard Huziak (2nd year)
Secretary - Al Hartridge
Treasurer - Norma Jensen
National Council Representative - Jim Young

COORDINATORS

Newsletter Co-Editors - Tenho Tuomi and Ken Maher
Events Coordinator - Jeff Swick
Fundraising Coordinator - Darrell Chatfield
Membership Coordinator - Mike Clancy
Observing Coordinator - Vacant
Sleaford Site Coordinator - Vacant
SSSP Coordinator - Vacant
Meeting Room Coordinator - Graham Hartridge
New & Distant Members Coordinator - James Gorkoff
Publications/Sales Coordinator - Bruce Brandell
Webmaster - Gordon Sarty
Librarian - Darrell Chatfield
Centre Photographer/Archivist - George Charpentier
Central Mailer - Ellen Dickson

COUNCILLORS AT LARGE

Jim Young Chris Martin Les Dickson

HAMPTON VILLAGE - Toward a Light-pollution Friendly City?

by Rick Huziak, Saskatchewan Light Pollution Committee

At a series of city council and committee meetings this spring, Dan Neves, Gord Sarty and I presented our arguments as to why the city should change from wasteful and pollution cobra-head street lighting with large drop lenses to flat-lens full cut-off fixtures that do not produce light pollution. After a committee study by City Engineering, it was recommended that two neighbourhoods, one on the east side, and one on the west side be built using the new non-polluting lighting fixtures. Over the objection of the City Planner, who thought the "experiment" would produce an undesirable lighting pattern that would affect housing sales in the new development, the Planning and Operations Committee reduced the trial to one neighbourhood - the new Hampton Village development, north of Dundonald and Westview, and southwest of the airport. There was also a comment made that 'now the city would have to stock *two different* lighting fixtures for installation and service", to which I answered, "I don't understand. Why don't we just stock the new fixture from now on?" Despite the City planner's objection, the City Engineer who presented the report stated that the new lights would not require differences in pole height or pole spacing, thus the installation cost was basically the same. Furthermore, dark spotting between the poles from the lights being more directed down would be worse, but still above the minimum allowable illumination. He went on the say that since glare would be reduced, that the dark spotting would not be noticed since your eyes will work better without the glare. We were very encouraged by the City Engineer's well-informed presentation and reasoning.

Even getting one trial neighbourhood is a huge step forward in our Saskatoon LPA fight. Hampton Village is now being built, and the first streetlights were installed in mid-September. True to their word, the streetlights are flat-lens, full cut-off (FCO) fixtures on standard height poles with standard spacing. The planner did not try to compensate by adding more lighting.

It is time now to start praising the city for their courage and forward thinking. I encourage all RASC members to go visit the new Hampton Village development and see the lights for yourselves. Compare the quality of the lighting to the glaring, over lit cobra-head lighting on 37th Street West – the road paralleling the Hampton Village.

The streets of Hampton Village are already shown in their futureness on page 8 of your Sasktel phone book maps. To find Hampton Village, drive west on 33rd Street, then 3 blocks past the Circle Drive underpass turn north on Junor Avenue. After Junor crosses 37th Street, you are on Hampton Gate. So far, the only other road in Hampton Village that is paved is McClocklin Road, turning east at the end of Hampton Gate. Along McClocklin are the new FCO streetlights, and at the end of McClocklin are a dozen or so houses, all on their new cul du sacs, and each with a single FCO fixture servicing them. Dundee Developments, the housing builder, has not compensated by having excessive outside lighting on the houses. Most houses have recessed pot lighting in their soffits, though some customers have chosen to place open-face lantern-style lighting on their front decks.

Once you have seen the improved lighting scheme, it really wouldn't hurt to start promoting this type of lighting to others, and really wouldn't hurt if you sent a letter off to your local city councillor and local MLA and MP. They all need to hear that this lighting is desirable and the right thing to do from the citizens of Saskatoon. **This means you!** The LPA Committee will send its own letters of praise, but it does not mean as much, since the Committee is seen by these government agencies as having a particularly strongly focused agenda. It is very important that this project gets talked up and written about. When you write your letters, please send a copy to me so that I know how much lobbying is going on.

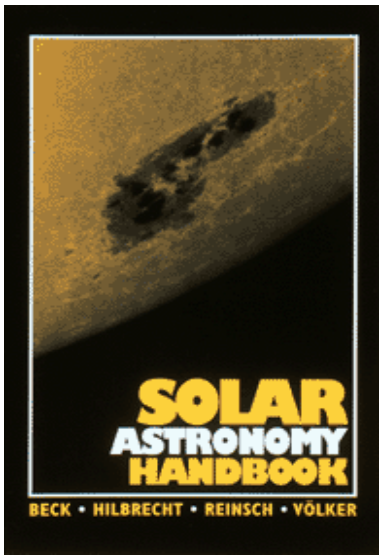
The city plans to evaluate Hampton Village for lighting quality, citizen comments, economic impact, crime rate and cost of operation and maintenance. They will not fit other new neighbourhoods with the new fixtures if there is no positive or just indifferent feedback. Saskatoon is in a building boom, with at least 4 new major neighbourhood developments going in next spring, including major commercial and residential sections south of Idylwyld Drive. It would be a lost cause not to have them get new FCO fixtures and not have the City change the basic way they do lighting.

Remember. If they do not adopt the new full cut-off lighting as standard new development practice, the new collector roads into the new subdivisions and major thoroughfares will all look like the newly renovated 25th Street, which was just upgraded from 40 old cobra head fixtures at 150W each to 120 unshielded acorn lights ranging from 50W to 250W each with 40 new 100W supplemental modern cobra heads. This upgrade, designed to "look good in the daytime" increased power use for the street by three times! Just this one street added 120 light-polluting lights to Saskatoon. Saskatoon sure doesn't seem to be very green at times! It will continue this way unless we ***all*** step forward and voice our deepest concern. The LPA Committee cannot do it alone.

SOLAR ASTRONOMY HANDBOOK

by Jeff Swick

So when is a book about the Sun not a book about the Sun? When it's a book about OBSERVING the Sun.



The Solar Astronomy Handbook from one of my favorite astronomy publishers Willman Bell Inc. is Chock full of useful information on everything from equipment, to methods, to planning your observing program. This easily read, easily understood book has 509 pages plus an index and is, in my opinion, a bargain for $29.95 USD plus shipping.

I found the most helpful section to be from pages 129 to 312, which concentrates on observing in white light using Baader film. If you don't know a light bridge from an inner bright ring this book will be of tremendous value to the beginning and even advanced amateur observer.

There are several advantages to observing the sun over traditional night-time observing.

The fact that it's done during daylight hours will be of benefit to most folks (and their employers & spouses). It can be done from the backyard which is a bonus given today's gasoline prices. And the simplest solar observing programs can take only minutes a day.

If observing in hydrogen-alpha is your thing there is a section here for you as well, covering items such as the difference between structures of both the quiet and active chromosphere, as well as measuring the velocity of prominences and filaments.

One real unexpected bonus to me was the section on Aurora (both visual and radio). Given that it is easily observed with just the naked eye and can easily shut down a deep sky observing session, one might as well make the use of the downtime. If you never knew what makes a rayed arc different from homogeneous band this book will set you apart from the crowd.

What causes the various colors in the aurora and what does it mean? It's all covered here in easy English with no physics degree required.

The handbook finishes up with fifty pages on solar eclipses as well as a general survey of solar astronomy literature and a thorough index.

You can check out a brief introduction and an extensive table of contents at the following URL:

http://www.willbell.com/HANDBOOK/hand6.htm

If you want to dazzle the folks at work with both the impact and the measurement of solar activity, (And who doesn't?) this book's for you.

BALTIMORE'S STARRY SKIES

by Mike Clancy

I've just returned from a recent trip down to a sister facility in Beltsville, Maryland. It's approximately half-way between Washington, DC and Baltimore, MD and home to one of the United States Department of Agriculture's largest facilities. Our hotel was located a short distance away from the facility, so I thought a pair of binoculars would give me something to do when not peering myopically down a microscope's tubes. I had 6 nights to wander about but I thought I'd best remove the arrival night and the departure night from the eligibility list leaving me the mid-week nights. I prepared by downloading weather predictions, which augured well for a Wednesday and Thursday night observing window, and preparing star charts for the area. Of particular interest would be Orion's Belt, which (although lower than my Dominican Republic trip) would be higher in the sky than similar Saskatoon observations. Thus armed, I was ready for the show, so to speak, only to be disappointed by the way the smoggy skies held the light pollution down. The only "star" I saw was Mars and the moon's usual greenish glow was given a sickly brownish hue by all that pollution!

So, the point of all this is that we've got remarkable skies here in Saskatchewan, with a clarity and darkness unknown to our southern compatriots. The folks warming up the fight against light pollution (led by our own Rick Huziak, among others) are working very hard to keep the madness known as the Eastern Seaboard from happening here, and they need our support to do so.

I, for one, want my grandchildren to know what the Milky Way looks like.

OCTOBER SIGHTINGS: PRINCE ALBERT

by Kathleen Houston

So there I was, faced with a crowd of excited stargazers, totally unprepared to give a talk and without an observing itinerary. The brave group had just finished parading all my stuff out to the clearing near Bob's house, and was expecting something unusual to happen next. At our September gravel pit observing group, newcomer Bob had invited us next observing night, to his acreage, just five minutes from the pit. So I took him up on the offer when rumblings from Della (my most keen supporter), motivated me to gather up people for a spontaneous Mars sighting. This seemed like a nice warm up to the Sleaford open house on the 29th, and Mars' brightest approach. I was also host to 6 kids between the ages of 7 to 12. Performance anxiety aside, I was impressed that so many would come on such short notice.

All 15 of us headed out from my place in town, by the river, in three vehicles. Reg and Sharon rode with me, and Reg knew the way. It was quite simple really. Sure beats the solitary 1h40 ride to Sleaford! The drive takes about 25 minutes, and the sky was cooperating rather nicely, in spite of the Clear Sky Clock telling me it was cloudy.

I had just adjusted the tube of the scope on the dobsonian mount and hoped for a few minutes to get "aligned". They all stood around expectantly ... so I introduced my telescope! Most had not seen this type of scope. I explained the light bucket principle and got them to see the primary mirror by coaxing them to inspect the inside and see themselves. Then I shone the flashlight at the eyepiece mount, dolled up with the fabulous red plastic from the summer star party, to demonstrate the secondary mirror.

Ellen had brought her spotting scope and Bob showed off his handy invention of attaching his binoculars to an adjustable light arm on his tripod. He had machined a couple of adjustments and had fashioned himself a terrific viewing stand. The kids were great at following my instructions of how to get to the "Coathanger" from Altair. I even got out my red filter to show off Mars and the moonrise was spectacular! I sighted the moon's terminator with a filter to cut down on the brightness and got quite a lot of enthusiastic exclamations from the kids. I can imagine that the moon is the first object any one of us tries to touch with our eyes and imaginations and binoculars are a great next step. A scope brings you up close and details are crisp and clean. The moon holds quite a bit of magic. People have been known to spend hours observing and drawing it.

It is nice to see a Prince Albert core group developing! We ended up having quite a terrific night, with our hosts Bob and Elaine offering hot beverages and a place to warm up in their home!

Correction from September's "M 62" article: Yellowstone Park is in Wyoming, not Utah!

SSSP VOLUNTEERS NEEDED!

CHAIRMAN NEEDED: The SSSP Organizing Committee is looking for a new Chairman. The candidate should have good organizational and communications skills, have past experience in working with teams of volunteers, and be willing to be a spokesman and ambassador-at-large for the star party. While a familiarity with SSSP, either as a volunteer organizer or as an attendee, would be an asset, it is not a requirement. If you are interested, please contact Les Dickson or Ron Waldron.

VOLUNTEERS WANTED: The SSSP Organizing Committee is also looking for volunteers to get involved with the organization and operation of one of the best star parties in Canada. The committee would like to encourage members of the Centre who have not been involved in SSSP to come forward, get involved, and bring fresh, new ideas. If you are interested, please contact Les Dickson or Ron Waldron.

OPPOSITION OF MARS

While not up to the quality of webcam pictures, ordinary digital cameras can be used to take astronomical pictures like these taken by a Canon A75 camera of Syrtis Major on Mars, on October 29, October 31, and November 3. About 150 pictures were taken of each and stacked with RegiStax. Pictures were taken afocal through an 8 inch telescope at 300 power plus 3.2x zoom on the camera set at 1024x768, for about 4 pixels per arcsecond.

-- Tenho Tuomi.

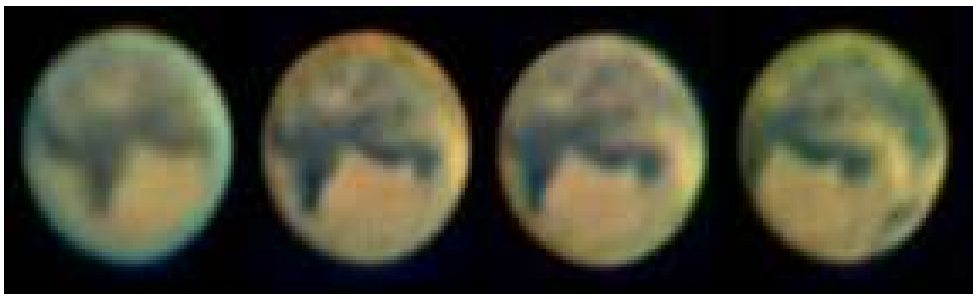
The Planets This Month, November 2005

by Murray D. Paulson, Edmonton Centre

Over the month of October one rather tenacious red rose has greeted me every night as I have dragged the telescope equipment out my garage door. It rambles across my passage to the patio. As my white flashlight plays across, its rich color tickles my senses and I grin to think of its challenge to Mars. The red planet has been the center of my attention, and I have had a few nights of great seeing. The planets are no disappointment this fall!

Mercury eluded me in the early evening, but I was surprised by how easy Venus was to spot deep into the south of Scorpio. Venus's greater elongation helps this greatly, and it doesn't help that Mercury is 2.7 degrees below the ecliptic. My location is awful with trees and houses blocking all horizons, so I did have to hunt for a good viewing site to occasionally glimpse it from. Mercury was at greatest eastern elongation on November 3rd, and will drop rapidly back toward the sun over the next 3 weeks to sit at inferior conjunction with the sun on November 24th. November by the way is Mercury's transit month, but Mercury crossed the ecliptic on November 21st, and it is the 24thwhen the sun catches up with it. On the 24th, it sits only one solar diameter above the sun. I have yet to be lucky enough to witness a Mercury transit, but some day! By early December, look for Mercury in the morning sky. The greatest western elongation is Dec 12th. This promises to be a good apparition and it will rise about 2 hours before the sun.

As for **Venus**, it shines brightly from the bottom of the ecliptic. At the beginning of November, it was at greatest Eastern elongation and shone at magnitude –4.4. In the eyepiece, you would have seen a 25.7" half disk. By the beginning of December, the planet looks a fat crescent which measures 41" and shines at –4.6. Despite the fact that Venus is now on it's way back toward the sun, it is rising up the ecliptic and lingers in the evening twilight! On December 4th you can see a 3.3 day old crescent moon 3.5 degrees below and south of Venus. This will make a nice photo op.



Mars, besides being a great vacation spot for robots, has been a delight in the eyepiece. The Martian closest approach was on Oct. 30, but due to the elliptical nature of it's orbit, it was actually slightly farther away on November 7th, it's date of opposition. At opposition, Mars was 20.0" in diameter, and shone at magnitude –2.3. I have been watching Mars approach since back in early August, and the south polar cap has dwindled to almost nothing. It is now hard to discern and from my best estimate, it is just over one arc second in size. At opposition the south pole was tipped 15.5 degrees toward us. On that evening, the blankest side of Mars was rotated toward us, Mare Sirenium and Mare Chimmerium regions. The good news was that since these regions were tipped toward us, you actually get to see lots more than the much blanker Northern regions. It is in this blank region that Nix Olympica sits, and you may be lucky enough to observe it's orographic cloud formations. I am assuming a mid evening time period of 10 pm for these descriptions. By November 14, we will start to see the Solus Lacus region, the dark "eye" of Mars, on the evening limb which is the preceding edge of Mars. A full moon joins us on the night of November 14 and sits 1.5 degrees above Mars. By November 21, Solus Lacus dominates the view, with small extensions on either side of it projecting northward, the modern view of canals on Mars. Can you see these? Features like these probably begged the viewer to see linear markings. It is here below Solus Lacus that Vallis Marineris is located. It is part of the extensions that are on the preceding side of Solus Lacus, and slightly north of it. A major dust storm was observed to start here back in late October. You could see it as a brighter region compared to a week earlier. By November 28th we see the Mare Erythreium and Margaritfer regions. Nilacus lacus and Mare Acidalium are in the extreme north of the planet at this time. Also the "club like" Sinus Meridiani, or central meridian will be on the preceding side of Mars. At the end of November, Mars has shrunk to just over 17" and it now shines at a magnitude of –1.6. In the first week of December, we are back to Syrtus Major which we last observed around the time of Halloween. On December 11th a slightly gibbous Moon will pass only 34 minutes of arc above Mars. They should both be visible in a medium high power field.

This will be a great month for observing Mars, but it may be your last chance for quite some time to give Deimos and Phobos a try. Use guide or your favorite simulator to plan on where they will be sitting, then use an eyepiece with a piece of black tape, or foil attached to the field stop. No, don't bother with your Naglers, a simple Plossl will do quite well. The thing you want to do is block Mars so not to blind you, and eliminate any glare it might scatter into the view. Phobos is Magnitude 10.9 at close approach, and Deimos is Magnitude 12. Happy hunting!

Jupiter is now a morning object, and it will be our morning star for the next few months. By early December, it will shine at magnitude –1.6, and will show a 32" disk in the eyepiece.

Saturn rises just after 11 pm in early November, and shines at magnitude 0.2. It will show you an 18.8" disk in the eyepiece, quite different from Mars in brightness and detail. The rings are tilted at 17 degrees to us. On November 21st you can watch as Saturn and an almost last quarter moon 3.5 degrees above it rise together in the late evening. By December Saturn now rises just after 9 pm and will be well placed to observe by midnight. It now is 19.5" in diameter and shines at magnitude 0.0.

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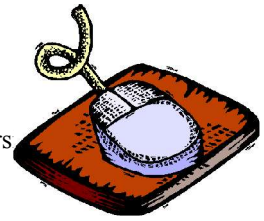
The Messier & Finest NGC lists can be found in the Observer's Handbook. The Explore the Universe list is available on the National web site. The Herschel 400 list is available at the web site listed below. The Binocular List will be available at each general meeting or can be mailed out on request to 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 vers
http://www.edmontonrasc.com/catalog.html

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A PARTING THOUGHT FROM DAYS GONE BY ...

"This is a telescope my Father bought before 1914 ... 50 mm with powers of 25, 30 and 35 ...

... we have a picture of him using it while standing on a horse!"
–Garry Stone