Saskatoon Skies

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

Vol. 39, No. 10 October 2008

Sleaford Observatory Open House Saturday, October 18



Fall gets into gear with an Open House and BBQ at the Sleaford Observatory. (See details on page 6.)
Earlier this month, Jeff Swick photographed autumn aurora during a night at Sleaford: "Although the aurora was strong to the north, I still had a wonderful view of the sky directly above. Note the sky glow from Saskatoon at

lower left."

Photo by Jeff Swick



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To view *Saskatoon Skies* in colour, see our Website: http://homepage.usask.ca/~ges125/rasc/newsletters.html

MEMBERSHIP? IT'S NEVER TOO LATE TO JOIN!

Regular: \$77.00 /year Youth: \$41.00 /year

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.

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 8:30-10:30 pm March April 9:30-11:30 pm May-July 10:00-11:30 pm 9:30-11:30 pm August 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.

LIGHT POLLLUTION ABATTEMIENT WEBSITE AT: www.ras.sk.ca/lpc/lpc.htm

Newsletter Editors – Tenho Tuomi, 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 material. **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 clkulyk@sasktel.net – 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 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 306-858-2453 for rates. Members can advertise non-commercial items free of charge.

RASC CALENDAR OF EVENTS

Oct 18	Sleaford Observatory Open House - 7:30 pm		966-6429
Oct 18	Training Session for 16" Scope - 3:00 pm, Sleaford	Rick Huziak	665-3392
	Observatory		
Oct 20	RASC Executive Meeting - 6:30 pm, 175 Physics, U of S.	Garry Stone	857-4707
Oct 20	RASC General Meeting - 7:30 pm, 175 Physics, U of S.	Garry Stone	857-4707
Oct 24	Observers Group – 7:00 pm, Sleaford Observatory	Larry Scott	934-5801
Nov 17	RASC Executive Meeting - 6:30 pm, 175 Physics, U of S.	Garry Stone	857-4707
Nov 17	RASC General Meeting - 7:30 pm, 175 Physics, U of S.	Garry Stone	857-4707
Nov 21	Observers Group – 7:00 pm, Sleaford Observatory	Larry Scott	934-5801
Dec 20	Observers Group – 7:00 pm, Sleaford Observatory	Larry Scott	934-5801

Minutes of the Executive Meeting September 15, 2008

by Al Hartridge

- 1. Meeting called to order at 6:30 pm.
- 2. Approval of the minutes of the previous meeting: Moved by Ron Waldron, seconded by Jim Young, and carried.
- 3. SSSP report: 2008 was the largest registration so far 316 people registered.
- 4. Nominations Committee: will be made up of Ron Waldron, Barb Wright, and Ellen Dickson.
- IYA activities: No Galileo scopes ordered. An IYA coordination committee will be formed including Les Dickson, Jeff Swick, and Ron Waldron.
- 6. Sleaford Open House: to be held on October 18, 2008
- 7. Jeff Swick has drawn up a list of activities to consider:
 - Astronomy Day in October
 - Relay for Life (scope setup)
 - Training for use of 16" at Sleaford
- 8. Silverspring Community Association astronomy course cancelled for lack of registrants.
- 9. Cypress Hills Observatory: Rick Huziak suggests a donation of \$1,500 to this cause.
- 10. Books: Bruce Brandell passed around a sheet to get an idea of what books people would like to be ordered.
- 11. Corporate Donations: A number of corporations have been approached, but so far none are interested in contributing to the Sleaford Observatory.
- 12. Meeting adjourned at 7:30 pm.

Minutes of the General Meeting September 15, 2008

by Al Hartridge

- 1. Meeting called to order at 7:35 pm.
- 2. Approval of the minutes of the previous meeting: Moved by Jim Young, seconded by Ron Waldron, and carried.
- 3. Events Committee: Jeff Swick mentioned the Sleaford Open House on October 18. Also would like to see a training course for the 16" telescope. Also suggests a second Astronomy Day in October.
- 4. Observers Group: Next one September 26.
- 5. Membership Committee: No change since last meeting.
- 6. IYA activities: Mike Clancy mentioned that parks are interested in hiring speakers during the summer. Good stipend.
- 7. Presentations:
- Arctic Solar Eclipse, by Dale Johnson
- Light Pollution (many birds dying because of casino lights), by Rick Huziak
- Amateur Astronomers Win Time on Canada's MOST Space Telescope, by Gord Sarty
- Saskatchewan Summer Star Party pictures, by Les Dickson
- 8. Meeting adjourned at 9:10 pm.

SKY BUYS & MIRROR CELLS

The Saskatoon Centre's Swap and Sale Page

FOR SALE: Orion 12" Intelliscope. Comes with 20mm eyepiece, a regular and Telrad finder; all for \$700. Phone: 241-5818.

MONDAY, OCTOBER 20, 7:30 PM

Room 175, Physics Bldg., U of S

There will be an Executive Meeting at 6:30 pm.

Annual Meeting & Election of Officers

Plus Rick Huziak on "Light Pollution Threats & Successes in Saskatchewan"



BOOKS FOR SALE

by Bruce Brandell, Sales Coordinator

All items will be available at our next meeting or call 249-1119, or email breeves@sasktel.net

R. Sinnott

G. Seronik

Sky & Telescope

Sky & Telescope

Sky & Telescope

W. Houston

S.J. O'Mearn

D.H. Levy

Whitehome

M.L.

8

3

3

1

1

4

9

\$24.50

\$26.00

\$19.00

\$5.00

\$24.00

\$39.00

\$48.00

\$16.00

\$3.00

\$8.00

Title Calendars	Author	#	Price	Pocket Sky Atlas Binocular Highlights
Culenaurs				Night Sky Star Wheel
RASC 2009	RASC	20	\$14.00	S & T Star Wheel
RASC 2007	RASC	3	\$5.00	Messier Card (unlaminated)
Skywatcher's 2009	S. Shadick	7	\$18.00	Deep Sky Wonders
Skywatcher's 2008	S. Shadick	1	\$10.00	The Messier Objects
Skywatcher's 07	S. Shadick	5	\$2.00	Scientific American Book of
Skywatcher's 06	S. Shadick	1	\$2.00	the Cosmos
•				Skyways-Astronomy
Books				Handbook for Teachers
				Saskatoon's Stone
The Backyard Astronomer's	Dickinson &	2	\$40.00	
Guide	Dyer			On the Moon
The Beginner's Observer's	L. Enright	5	\$19.00	On Mars
Guide			ſ	
Observer's Handbook 2006	RASC	5	\$5.00	" A
Observer's Handbook 2005	RASC	1	\$2.00	* 4 0
Practical Astronomy	S. Dunlop	3	\$14.00	
Summer Stargazing	T. Dickinson	4	\$18.00	All All
Celestial Sampler	S. French	4	\$26.00	
Firefly Astronomy Dictionary	Firefly	3	\$14.00	Celestron
Firefly Planisphere	Firefly	4	\$19.00	CPC and NexStar SE
Seeing in the Dark	T. Ferris	2	\$18.00	always in stock
Night Sky Atlas	R. Scagell	3	\$24.00	arrayo motoon
Stargazing with a Telescope	R. Scagell	2	\$14.00	. 2
Beautiful Universe	Sky & Telescope	1	\$12.00	A 2.
There Once was a Sky Full of Stars	Crelin & Ziner	5	\$20.00	
Space 50 Years and Counting	Sky & Telescope	1	\$13.00	
The Moon Observer's Guide	P. Grego	3	\$14.00	(1)
Isabelle Williamson Lunar	RASC	<i>3</i>	\$10.00	13
Observing Program	KASC	,	φ10.00	
The Sun Observer's Guide	T. Spence	3	\$14.00	Antares 12" Dob Clearance Special
Moon Map (laminated)	Sky & Telescope	6	\$6.00	\$699.95 Penta
Field Map of the Moon	Sky & Telescope	3	\$12.50	Eyepie
Lunar 100 Card	Sky & Telescope	2	\$5.00	
Mars Observer's Guide	N. Bone	2	\$14.00	111 0
Deep Sky Observer's Guide	N. Bone	2	\$14.00	All-Sta
Stars	Zim Baker &	1	\$10.00	
	Chartrand		7	31020 H
Exploring the Night Sky	T. Dickinson	11	\$9.50	1-
Exploring the Sky by Day	T. Dickinson	10	\$9.50	www.All-
Patterns in the Sky	K. Hewitt-	3	\$16.00	
j	White			



A Roundup of Reports From SSSP 2008

Rick Huziak: Of our three official SSSP nights, we scored two clear, with very dark skies, excellent Milky Way dark nebulae, and the zodiacal cone and band and Gegenschein clearly visible, especially toward mornings. Attendance was up, with guests from Newfoundland, Vancouver Island, the Northwest Territories, BC, Alberta, Saskatchewan, Manitoba, and Ontario: 316 registered in total.

Mike Clancy: My dear wife couldn't accompany me this year, so I was a bachelor on top of the hill for the first time in any of my visits to the star party. There I was all alone with 300 or so fellow astronomers. I set up my tent over in the south wooded area to afford some measure of relief from the strong winds that blew until well into the wee hours. I got started viewing Thursday night by aligning the finder scope on my 90mm Maksutov-Cassegrain "travel scope" on Jupiter at about 20:45, then got down to a wonderful (if chilly) night's observing.

I had no real plan, as what I usually do at the SSSP is simply find some old favourites and marvel at how much better they look from the Meadows! I wandered around the night sky until about midnight, at which time I realized that the object which kept hitting me in the eye was my eyepiece, so my nodding head meant an earlier night than I'd planned. (Mind you, I did get up about 04:00 to observe again for another hour or so.) In all, I found 36 Messier objects, several NGCs and Cr objects, various nebulae and Iridium flares, and had rather a good time of it!

Friday, Jim Young and I met up with several other SSSP delegates at the Cypress Hills Winery, where we sampled some excellent wines and enjoyed a lovely lunch on the patio, simply drinking in the sunshine and gardens. That night, the skies were cloudier, and I must admit I nodded off in my chair waiting for them to clear. My neighbours were astonished at the sheer volume of my snoring and so were quite glad when I awoke shortly after 01:00 to continue observing. The skies had cleared marvellously, and I believe the clarity was better than the night before! I spent some time hunting down Uranus, and I think I actually found it, but it wasn't a very spectacular view in a 90mm Mak. Still, the skies were marvellous even though the light bubble from Medicine Hat could be seen to the WSW – I'd never noticed that before.

Saturday afternoon was spent with our main speakers, enjoying their fine presentations. I also won one of the two spotting scopes donated by All-Star Telescope; many thanks to them for the prize, and to Darrell Chatfield for organizing the door prizes once again. It was a weekend of stars, friends, fellowship, and discovery. I met some new friends whom I am now looking forward to seeing next year. I renewed acquaintances with some old favourite celestial sights, and I got to do some sightseeing in the beautiful Cypress Hills. Altogether a very enjoyable and successful star party!

Denis Fell:

(Reprinted from SpaceAlberta.com with permission)



SSSP 2008 had a record attendance

Photo by Denis Fell

I had a good night Thursday with the tv102 on Jupiter and deep sky in Saggitarius, and an excellent night Friday with the 12" Dob doing deep sky after watching Io transit Jupiter and Ganymede and Callisto get occulted. Some observing highlights [for images, see http://www.spacealberta.com/sssp08/sssp08.htm] included: M8 (Lagoon Nebula) - full field of nebulosity with outer regions well defined; M20 (Trifid Nebula) - dark lanes visible with extensive nebulosity; Veil Nebula - like someone painted it with oils across the sky; M101 - easily seen with spiral arms, several other smaller galaxies in the field; several globulars in Ophiuchus resolved entirely.

Several vendors were present, and had many instruments and accessories on display, including a Skyshed Pod. I also managed to pick up a second prize for my Lunar "X" photo and a pair of 7 – 15 x 50 Celestron binoculars as a door prize. All in all, a great weekend.

Editor's Corner

by Christine Kulyk

If you're looking for a special way to celebrate Halloween, you might give the kids on your block a nontoxic treat by setting up a telescope in your front driveway so they can view Jupiter or another "friendly star" (see "The Littlest Astronomer" on Page 7). Weather permitting, October 31 can be a great night for some sidewalk astronomy.

On a more elevated note (820 kilometres high, to be exact), Saskatoon Centre member Gordon Sarty has won the chance to observe with Canada's orbiting space telescope, MOST. Arising from his long-time interest in variable stars, Gord's project will be tracking fluctuations in the light curve of a microquasar known as LS5039. He's now eagerly planning for his observing time on MOST, scheduled for next summer. Congratulations, Gord!

Open House & BBQ at Sleaford Observatory

by Jeff Swick

Coming up on October 18 is our annual Open House at Sleaford Observatory. Last year, we had over 300 people attend with the good weather, so let's hope for the same this year. A reminder that this is a rain-orshine event, so if you have committed to participating, please remember there will be no "rain delay." Stan and Yannis are arranging a car convoy leaving from the Saskatoon Field House (7:00 pm) and also providing some students to operate the scopes in the roll-off shelter. Everyone is of course encouraged to bring their own scopes. This is a perfect opportunity to showcase your hobby to your friends, family, and coworkers, so invite them out!

There will be a potluck BBQ starting at about 4:30 pm before the Open House. Bring whatever meat you plan to cook, plus a salad OR dessert to share. Paper plates

and cutlery will be supplied, as well as coffee and soft drinks.

The success of this event depends on YOU: Even if you cannot attend, please assist by printing copies of the poster and putting it up at your local gas station, corner store, shopping centre, community events boards, etc. You can find the poster here: http://tinyurl.com/4epyq3

Finally, I want to say a big thanks to everyone who volunteered and participated in making the SSSP 2008 at Cypress Hills such a fun weekend. The organizing committee is now planning for our 2009 combined SSSP and RASC national General Assembly, so if you would like to help in whatever capacity, please reach out to committee Chair Barb Wright, and she will point you in the right direction.

Training Seminar for Sleaford Roll-Off and 16" Scope

by Rick Huziak

I will be holding a training seminar for those who would like to be certified using the U of S roll-off and the 16" Meade LX-200 GoTo telescope at the Sleaford Observatory. Date & Time: October 18, at 3:00 pm sharp, at Sleaford. (Phone me at 665-3392 if you need more info.)

In preparation for this seminar, you should already have read the *Instruction Manual*, 16" Meade LX-200 S-C Telescope from page 9 onward for about the

next 10 pages, or until you get sufficiently bored. Skip the stuff that doesn't seem important; but you will need to understand the basics of the paddle control. I will also post a *Sleaford Users Manual* at the same page (see below) sometime between October 1 and 16, and you should read the relevant parts of that document as well. Like the RASC BBQ and Sleaford Open House being held on the same day, this seminar will go rain or shine with the only exception being *really*, *really* awful weather.

Manuals can be found at the link below – there is a small link just above the 16" telescope photos on this

page (but the server is super slow, so be patient): http://homepage.usask.ca/~ges125/rasc/telescopes.html (I can also email the manual to you if you would like.)

The Littlest Astronomer

by Jeff Swick



Lexy discovers a "friendly star"

Photo by Jeff Swick

So I'm in the garage with the lights off, looking at double stars (my latest adventure for those not-so-good nights). I had heard Skoobz the astro dog make a noise, but I thought it was just a cat and thought nothing of it.

Soon I feel a tug on my jeans and almost jump out of my shoes, and I hear a little voice: "Happy birthday, Pappa." It was my granddaughter Lexy. (I didn't even know they had come in to town.) Then she says, "I want to see the moon and star, Pappa." The moon was on the other side of the house, so I showed her the double double that the scope was on and then moved the scope out to the alley so she could see Jupiter. (Note to self: sneak over and trim the neighbours' tree.)

Jupiter was down in the mush, but she was able to see it and four moons, so I told her about it, not thinking she would understand. She turned to go into the house, and I asked her where she was going. She tells me, "I don't want to get hit by a car, Pappa." (Remember, we had moved the scope into the back alley.)

Anyway, I put the scope back in the garage and go into the house, and my daughter says, 'Lexy came in and told me: 'I saw Jupiter and four moons... It was a friendly star.'" Sometimes you just can't help but smile.

Polar Eclipse Expedition

by Murray Paulson

It all started with a phone call on New Year's morning 2007. Stephen Bedingfield offered me two of the eight spots on a Cambridge Bay eclipse trip. One for me and one for my wife Joanne. It didn't take much convincing.

The other six were Steven Barnes and Karen Finstad from Ontario, Alister and Valerie Ling from Edmonton, Alan Dyer from Cluny, Alberta, and Steve Bedingfield from Yellowknife. Our intention was to floatplane from Cambridge Bay, then witness the eclipse on land from the eastern side of Victoria Island near Latitude 69.07 and Longitude 101.70. Here, we would get about 1:20 of totality, and we would be the first people on Earth to see the August 1, 2008, total solar eclipse.

In the days before the eclipse, Alister Ling decided from weather data that the cloud tops would be near 20,000 feet on eclipse morning, so we had to change plans. Fortunately for us, a twin turboprop King Air was available. We took off at 2:27 am, climbed out of the haze and cloud, and at 2:46 am, we finally saw the crescent Sun rising through the cloud deck.

I had won the window lottery and got the copilot's seat for photographing totality. To shoot the eclipse, I used a Canon 70-200 f4, IS zoom, because it would give me the best chance of getting a decent image in a hand-held situation. I hadn't taken into account how much I would be shaking from the adrenalin and excitement! We could see the Moon shadow progressing from right to left, and all of a sudden we were in totality (3:24 am Cambridge Bay time). The

plane was filled with shrieks and hollers of excitement. WOW!



The corona was one of the more interesting I have seen, asymmetrical with great streamers, and there

was Mercury 3 degrees to the east. The Moon's shadow streaming across our atmosphere was very prominent and dark. Shortly after third contact, we headed back to Cambridge Bay. I had an added bonus of getting to pilot the plane for part of the way. On the runway in Cambridge Bay, we witnessed the final 20 minutes of the eclipse through smoke and thick haze. What a blast!

L-R: Steve Barnes, Joanne Paulson, pilot, Karen Finstad, copilot, airport staff, Valerie & Alister Ling, Steve Bedingfield, Alan Dyer, Murray Paulson

Photo by Murray Paulson

National Council Rep's Report

by Les Dickson

Since the National Council meetings and AGM at the General Assembly in Toronto the end of June 2008, we have had a new set of national By-Laws put into place. The changes were required by the recent changes to the Income Tax Act with respect to registered charities.

There are four classes of Society memberships: Ordinary, Youth, Life, and Honorary (article 3.02). An ordinary member is one who has paid the annual ordinary Society membership fee under Article 3.05(1) of the By-Laws. A youth member is one who has paid the annual youth Society membership fee under Article 3.05(1) of the By-Laws and who is less than 21 at the time. A life member is one who has paid the life membership fee under Article 3.05(1), or a member upon whom the Council has conferred life membership in recognition of specified meritorious service to the Society or to a Centre. Life members do not have to pay an annual Society fee, but may have to pay an annual Centre membership fee if they are affiliated with a Centre. An honorary member is a person upon whom honorary membership has been conferred by the Council in recognition of noteworthy contributions to astronomy. A person simultaneously hold both honorary membership and life membership. Only ordinary, youth, and life members are voting members.

The By-Laws acknowledge the existence of associate members (article 3.04(3)) who belong to the same family as an ordinary, youth, or life member attached to a Centre. Associate members are *not* members of the Society, only members of a Centre. Each Centre sets the rules by which someone may become an associate member and sets the fees for such membership. Note that associate members cannot vote on Society matters, be an officer of a Centre, be on the Council of a Centre, or receive any of the publications that Society members receive. It is possible for someone to be a full voting member of one Centre and be an associate member of one or more other Centres.

Membership fees for ordinary, youth, and life members are set from time to time by National Council. Currently, the annual fee structure is such that ordinary members who are attached to a Centre pay \$44 to the national Society and \$23 plus any Centre-mandated surcharge to the Centre. (Saskatoon's surcharge is \$10.) Society members who wish to remain unattached to any Centre pay a fee of \$67 to the Society. Centres can change their own Centre surcharge from time to time as they wish, without consulting the Society.

Mercury sits in inferior conjunction at the beginning of October, passing only 1.8 degrees below the Sun. With dizzying speed, it zips to its greatest western elongation on October 22! This is one of the shorter elongations - 18.5 degrees - but it is a favourable morning apparition. Mercury will show a 6.8", 56 percent-illuminated disk, shining at magnitude -0.5. Rising 1 hour and 50 minutes before the Sun, at 6:17 am, it will be 5 degrees above the horizon, a little south of due east, and should be fairly obvious if you have a clear horizon. In a week's time, Mercury will brighten to magnitude -0.8 and rise 1 hour and 40 minutes before the Sun.

Venus is still making its journey out from the Sun, and in the first week of October, it sits 32 degrees from the Sun and shines at magnitude -3.9. In the eyepiece, you will see a 12.4" fat gibbous disk. With this unfavourable evening apparition, you will need to be quick to hunt it down shortly after sunset. It will sit only 5 degrees above the horizon, so use binoculars and look about 30 degrees south of where the Sun disappeared. By the end of October, Venus will sit 10 degrees above the horizon and 36.5 degrees from the Sun just after sunset. It will now shine at magnitude -4, and the gibbous disk will be 13.7" across.

Mars is getting ever nearer the Sun, and it is lost in twilight glare. It will be sometime next year before you get the chance to see it in the morning sky.

Jupiter still hangs prominently in the southern evening sky and is the first "star" of the night. At the beginning of the month, it shines at magnitude -2.2 and will show you a 39" disk in the eyepiece. I have had varying degrees of luck viewing and imaging it over the last two months. I have had a few good evenings where shortly after sunset the seeing down close to the horizon was quite good. By the first week of November, Jupiter will shine at magnitude -2 and will have shrunk slightly to 36". It now transits the meridian at sunset, and will rapidly disappear shortly thereafter.

Saturn is in the morning sky just below Leo, where it rises around 5:00 am, 2 hours before the Sun. It shines at first magnitude and will sit prominently in the southeast. Over the month, it will climb in the sky, and

by the first week of November, will rise more than 5 hours before the Sun. It now will show you a 16.5" disk in the eyepiece if you care to get up that early!

Uranus is still a fine target. It transits the meridian at midnight and shines at magnitude 5.5. In the eyepiece, you will see its 3.7" blue disk. When it transits the meridian, it sits 31 degrees above the southern horizon, a fine target indeed while other planets are too close to the Sun and unfavourably placed. If you have lots of aperture, hunt down the brighter moons of Uranus. Titania and Ariel are magnitude 13.9 and 14.3 respectively. In one month's time, Uranus will transit the meridian at 10:00 pm.

Neptune transits the meridian at 10:00 pm at the beginning of October and sits at 20 degrees above the horizon. It shines at magnitude 7.8, and in the eyepiece will show a 2.3" blue-green disk. Check the *Observer's Handbook* for a chart showing its position. If you get a very transparent night, you might try for its bright moon Triton. Triton shines at magnitude 13.5, and should be relatively "easy" in a 10". We are seeing its orbit almost from directly above, so it sits from 12" to 15" from Neptune and describes an elliptical path.



Glorious detail in grand-design spiral M100, photographed in spring 2008 with an ST10XME CCD, ~200 min. in LRGB format

Photo by Al Hartridge

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, B. Burlingham

109
105
100
96
93
85
77
75
57
30
24
23
5
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
Donna-Lee May	New!	14
George Charpentier		13
Ken Maher		10
Mike Clancy		7
<u> </u>		

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

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!	368
Gord Sarty		251
Scott Alexander		117
Mike Oosterlaken		68
Sandy Ferguson	-	18

HERSCHEL 400-II CLUB

Certified at 400 Objects:

Darrell Chatfield	Up!	312
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.

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.astroloeague.org/al/obsclubs/herschel/hers400.html

Donna-Lee May chose to get her Messier Certificate through the Edmonton Centre. Good luck on the FNGCs.

Observer's Group Notes

by Larry Scott



You people are crafty. Darrell and I not so much. The Observers Group for September 26 started out looking awesome. Warm, clear, calm, no bugs, and no snow. It all looked good until we looked up. There was so

much dust in the air, the sky was grey instead of black. It felt like we were observing in the city instead of the country. We did get to ogle each other's new scopes for a while, although I am looking forward to trying it under better skies.

Next scheduled Observers Group is October 24. Moonless skies run from about October 22 till November 4. After that, the Moon will be intruding again.

One more site to check out if you're looking for used equipment is http://www.astromart.com/. Lots of equipment, but you do need to buy a \$12 membership to get full use of the site. If someone has any other sites they'd like to share, let me know. I've pretty much run through my usual suspects.

See you at Sleaford.