

Saskatoon Skies

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

Vol. 41, No. 7/8

July/August 2010

Saskatchewan Summer Star Party August 12-15



It's time to get together for our annual gathering under the beautiful dark skies of Cypress Hills, Saskatchewan. Don't miss out — REGISTER TODAY, if you haven't already done so (see details on page 8)!

Photo by Tenho Tuomi (SSSP 2007)



Saskatoon Centre

The Royal Astronomical Society of Canada
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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

Associate: \$33 /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, Mark de Jong, or renew through the National Office and let Mark 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 norj@sasktel.net .

U OF S OBSERVATORY

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

Observatory Hours:

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

SASKATOON CENTRE'S MAIN OFFICERS:

President – Barb Wright, 249-1990
Secretary – Ron Waldron, 382-9428
Vice-President – Jeff Swick, 373-3902
Treasurer – Norma Jensen, 244-7360

Bottle Drive & Canadian Tire \$

By Colin Chatfield

If you cannot make it to a meeting but would like to contribute your Canadian Tire money please call me at 934-7046.

Newsletter Editors – Christine Kulyk & Tenho Tuomi

Copy & Collate – Les & Ellen Dickson

Labels & Temps – Mark de Jong

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 indicated), provided that proper source credit is given. DEADLINE for submissions for each month's issue is the 20th of the preceding month. Saskatoon Skies accepts Commercial advertising. Please call the editor 306-858-2453 for rates. Members can advertise non-commercial items free of charge.

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

RASC CALENDAR OF EVENTS

Aug 7	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801
Aug 7-15	Mt. Kobau Star Party – Mt. Kobau, BC	http://www.mksp.ca	
Aug 12-15	Sask. Summer Star Party – Cypress Hills park, SK	Rick Huziak	665-3392
Sep 2-6	Spruce Woods Star Party – (for RASC members only) Spruce Woods Prov. Park, MB	rcberard@gmail.com	
Sep 7-12	Northern Prairie Star Party – Black Nugget Lake, AB	http://www.edmontonrasc.com/public/nps.html	
Sep 10-12	Alberta Star Party – Starland Recreational Campground, AB	http://calgary.rasc.ca/asp2010.htm	
Sep 11	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801
Sep 20	RASC Executive Meeting - 6:30 pm, 175 Physics, U of S	Barb Wright	249-1990
Sep 20	RASC General Meeting -7:30 pm, 175 Physics, U of S	Barb Wright	249-1990

SASKATCHEWAN SUMMER STAR PARTY! August 12-15 at Cypress Hills

Join us at the best darn star party in Saskatchewan! Held on the New Moon weekend of August 12-15 at the Cypress Hills Dark Sky Preserve, with keynote speaker Stan Shadick (University of Saskatchewan) on “Investigating Exoplanets With Small Telescopes.” All of our popular activities are back: solar observing, swap table, wienie roast, “Under the Living Skies” lecture, Friday presentations, Saturday talks, under-the-stars clinics, photo contest, red-light café, on-site astro-vendors, 10-year awards, door prizes, moose, and much more! Come have a blast! (See page 8 for details.)

RASC SASKATOON CENTRE GENERAL MEETING



MONDAY, SEPTEMBER 20, 7:30 PM
Room 175, Physics Bldg., U of S
“Star Hopping & Other Tricks to Navigate the Night Sky”
by Ron Waldron

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

SKY BUYS & MIRROR CELLS

The Saskatoon Centre’s Swap and sale Page

FOR SALE: Discovery 12.5" f/5 PDHQ Split-Tube Dobsonian. Bought in 2007 and used six times. Made some modifications to stiffen the box. Nice views from an excellent mirror, but too much scope for me. Will ship at buyer's expense, or willing to deliver for gas money. Scope currently lists for \$1,699; I would like \$1,000. Contact Norma: norj@sasktel.net

Minutes of the Executive Meeting, June 21, 2010

by Ron Waldron

1. Meeting called to order at 6:39 pm.
2. Approval of the minutes of the previous meeting: Moved by Tenho Tuomi, seconded by Jeff Swick, and carried.
3. National Report (Rick Huziak): Executive Director has been hired by National Office.
4. Sleaford Report (Rick Huziak): Renovations have been delayed by rain, but there are plans for Rick and Darrell to go back this week and remove the wall between cold storage and the warm-up shelter. This will be followed by removal of the floor for insulation purposes. The outside walls will be upgraded from 2x4 walls to 2x6 insulated walls. All storage items have been moved to the schoolhouse.
- Immediate help is not needed due to room restraints — an actual work bee date is still to be determined.
- Jeff Swick asked if anything has been done with the focuser on the 16" telescope. Rick responded that members are welcome to help with ordering the new focuser. Jeff responded that he would like to help. Darrell Chatfield will send him the ordering information.
5. Other Business:
 - Barb brought a box of books that belonged to Bill Hydomako, with the intent to use them to raise money for the Hydomako building fund. Jim Young suggested that some of the books be left unsold as they can be used at Sleaford for observing purposes. It was decided that the 3-volume *Uranometria* and the moon atlas will be stored at Sleaford and a sticker will be placed in each volume to indicate they were donated by Bill Hydomako. The rest will be sold by e-mail auction.
 - Steak Night at Mulberry's was cancelled due to lack of numbers.
 - Jeff commented that five new members benefited greatly from the new members' session held at the observatory on June 17.
6. Meeting adjourned at 7:08 pm.

Minutes of the General Meeting, June 21, 2010

by Ron Waldron

1. Meeting called to order at 7:32 pm.
2. Approval of the minutes of the previous meeting: Moved by Ellen Dickson, seconded by Darrell Chatfield, and carried.
3. Fundraising (Colin Chatfield): Steak Night was cancelled due to insufficient numbers.
4. National Rep (Rick Huziak): He will be attending the GA. There are no outstanding issues, but he is willing to take any issues we might have. A National executive director has been hired on a probationary basis.
5. Events Coordinator (Pat Gakis):
 - Thanks to all who came and helped at the New Members' Night held in the Observatory on June 17. Another event will be planned for new members in the fall. Pat is interested in any and all ideas.
- August 7 — Meadow Lake is looking for members to come and provide a star night and observing. Accommodation, mileage, and an honorarium are often provided by these requests.
6. Observers Group: Next observing night at Sleaford is July 17.
7. Site Coordinator (Darrell Chatfield):
 - Renovations have begun (see Executive Minutes). Jim Young reminded the renovation crew that the wall they are removing is an outside, load-bearing wall.
 - Rick Huziak stated that he hoped the work on the dome would begin in the fall.
8. Light Abatement (Rick Huziak):
 - Kathleen and Rick were at Christopher Lake acting as advisors on light pollution.

- Application for light as a recognized pollutant within the Saskatchewan Environmental Code was rejected. They have suggested that it be pursued under existing nuisance by-laws with each rural municipality.
9. SSSP Committee (Les Dickson):
- Melanie at the park has indicated that the recent heavy rainfalls have been a problem, but only in the low areas just outside the park.
- Only having half the accommodations we are used to is proving to be somewhat frustrating. The status of the rooms will be e-mailed to Les soon.
 - There are still some spots for speakers available.
10. Presentation: Darrell Chatfield on “Tuning Up Your Telescope.”
11. Meeting adjourned at 9:10 pm.

President's Message

by Barb Wright

As my term as Centre President comes to an end, I would like to thank every one of you for all your dedicated hard work during the 2009 International Year of Astronomy, for the 2009 General Assembly in Saskatchewan, for the Saskatchewan Summer Star Party, for the Saskatoon Centre. We stretched our Centre to a wider breadth with many varied community activities, observing sessions,

presentations, meteorite hunting, Sleaford development. It's been fun; it's been busy; it's been a good learning experience.

Thank you all for your valuable contributions. See you at Cypress Hills (a drier Cypress Hills, I hope) and then in September, ready for another action-packed year!

National RASC Now Has an Executive Director

For the first time in RASC history, our National Office has hired an Executive Director. Deborah Thompson has worked in the nonprofit sector for many years, most recently as interim Executive Director of the Ontario Equestrian Federation. She holds a marketing degree from Ryerson and the Certified Association Executive designation of the Canadian Society of Association Executives (CSAE). She is also

immediate past president of the Trillium Chapter of the CSAE in Ontario.

Let's all extend our good wishes to Deborah and be ready to offer her any assistance she may require in taking on the many challenges of this new position as our organization evolves and heads into the future.



On June 1 the Asteroid Ceres went across M8, the Lagoon nebula. Picture is composed of 27-1 minute pictures stacked, taken through a 12" Newtonian with a Canon Rebel XT camera.

Photo by Tenho Tuomi

Saskatoon Centre New Members' Night

by Colin Chatfield

At a recent Saskatoon Centre meeting, I had suggested we have a New Members' Night as a way to get new people out and have some experienced astronomers share their knowledge. As a new(er) member myself, I thought this would be a good idea, since there is much I need to learn about astronomy in general.

We met at the University of Saskatchewan Observatory on June 17. It was organized mainly by Patricia Gakis (thanks for that). Centre members Richard Huziak and Mike Clancy spoke to us. Rick talked about choosing telescopes, eyepieces, and binoculars, while Mike spoke about the Explore the Universe Certificate program offered by the RASC. There were about 10 people who were out to listen to the talks, which were enjoyable, informative, and entertaining. Thanks to Rick and Mike for speaking.

Thanks to everyone involved for making this a good start to what are certain to be many New Members' Nights; including topics on astrophotography, etc. If there is a topic you are interested in learning about in a format such as the New Members' Night, please let one of us know.



The Observatory, with its 6-inch refractor, has been a fixture on the U of S campus for many years (for Observatory info, visit

<http://physics.usask.ca/observatory>)

Photos by Colin Chatfield



Rick Huziak gave new members an overview of telescope basics



Mike Clancy helped us begin to Explore the Universe

Editor's Corner

by *Tenho Tuomi*

We all have been complaining about how cloudy it has been for the past few months; but when I went over my observing log, I was surprised that I had an above-average number of observing days for the last five months. Part of the reason certainly is that I started on the Isabel Williamson Lunar Observing Program in January. I am now making use of half the month that I used to waste waiting for the Moon to go out of the way.



Comet McNaught on June 14 through an 80mm refractor, 3-1 min. exposures with a Canon Rebel XT

In June, I observed on 12 days in spite of the clouds, and only three of those were spent observing the Moon. There was another attraction: comet C/2009 R1 (McNaught). I took pictures of it on seven nights. By mid-month, it sported a nice double tail. The remaining two nights were spent observing a nice

lineup of planets and the Moon in the evening, and trying to observe a moon shadow crossing on Jupiter in the morning.

However, my highlight of the month was being invited on June 15 to talk to my granddaughter's grade 3-4 class at Roland Michener School in Saskatoon about the Solar System. I showed various pictures of Solar System objects that I had taken myself. I showed my meteorites, for they also are Solar System objects. Everyone had a look through my 80mm refractor at one of the planet pictures they had on the wall.

A couple of weeks after giving this presentation, I received a booklet of 25 thank-you notes from the students and their teacher. The star-shaped cookies that my wife Velma brought to the class received the most thanks. Some other comments were: "The cookies were very good! I also loved those comet pictures!" "I liked the pictures of Venus. The sundogs were cool too." "My favorite picture was of Jupiter." "My favorite was the moon!" "I especially liked how we got to choose which one is a meteorite or not." "I really liked your telescope. I liked the part when you looked through the top part and it was upside down." "I loved the one picture of Saturn that looked fake."



The kids at Roland Michener School had a great time learning about astronomy

Photos by Tenho Tuomi

Join Us at the Saskatchewan Summer Star Party August 12-15

by **Rick Huziak**

We'll throw you a humdinger of a great star party, if we do say so ourselves! The star party is held on the New Moon weekend of August 12-15. Do you need a better reason than observing in a 7+ magnitude naked-eye sky from the Cypress Hills Dark Sky Preserve? And since we are not working around Starfest dates this year, we have chosen a weekend where rain should not be an issue, not that we're still sore about last year's soggy GA/SSSP!

Our Fr. Luke Kemble keynote speaker is Stan Shadick (University of Saskatchewan). His talk is "Investigating Exoplanets With Small Telescopes." All of our popular activities are back: solar observing, swap table, wienie roast, the "Under the Living Skies" lecture, Friday presentations, Saturday talks, under-the-stars clinics, photo contest, red-light café, on-site astro-vendors, 10-year awards, door prizes, moose, and much more! Come have a blast!

The star party is held at the Cypress Hills Interprovincial Park, 20 kilometres south of Maple Creek, Saskatchewan. Everyone is welcome: we cater to the entire family, from seasoned observers to ripe newbies, and we don't forget about the spouse and kids! And the best news: park admission and the SSSP registration fees are the SAME as the 2008 prices! (Sorry for the banquet increase, but we charge only what the resort charges us!)

Register early, and decide NOW if you are coming. If you are tenting, no sweat — there is

room for hundreds of tents. Resort accommodations — another story! Most of the rooms were booked long ago (as they always are for SSSP). And the resort continues to renovate cabins this year, so we have a bit of a room shortage. If you need a room, e-mail me (sssp.sk@sasktel.net ; or rickhuziak@shaw.ca) or phone me (306-665-3392 evenings), and I will put you on our waiting list. In the past, we've usually found a way to fit everyone in.

Success speaks for itself: 85% of our attendees come back year after year. Join your 275 closest friends at SSSP 2010! Everyone welcome!

Registration forms are up on the Website. SSSP 2010 Details:
<http://homepage.usask.ca/~ges125/rasc/sssp2010.html>

Straight to SSSP'10 Registration:
<http://homepage.usask.ca/~ges125/rasc/2010SSSPRegistrationForm.pdf>

Just print it off, fill it in, and send it off with your cheque. (Sorry, no credit cards.)

All-Star Telescope
31020 Hwy. 2A, Didsbury, AB
1-866-310-8844
www.All-StarTelescope.com



HyperStar Imaging
All-Star Telescope is now offering HyperStar equipment and Celestron CPC 11" and CGEM and Edge 1100 HD telescopes with HyperStar conversion.



Authorized HyperStar dealer!

Telescope Collimation: A Woeful Story With a Happy Ending

by Ron Waldron

Let me begin by saying that I have had my 10" Sky-Watcher Dobsonian telescope since April of 2003 and never had a problem with collimation. I have all the tools — the Cheshire collimator and a laser collimator. They have always worked flawlessly in aligning my f/4.7 optical path. That is until about 14 months ago.

The problem was I began to see inferior images, mostly in the form of a double image. It would occur at high power, i.e. 100x plus or more. It was most obvious on the ring of Saturn, as it would appear with a double knife-edge. I checked the original focuser and noticed it had developed a significant amount of "slop" over the years, so I replaced it with a two-speed low-profile Antares focuser.

I noticed I could never see all the clips holding my mirror after the collimating process was completed. So I spent the next many months collimating, re-collimating, and still nothing worked. I purchased and installed "Bob's knobs" to make the collimation process even easier, but that didn't help either. I remounted and centred the secondary. I read numerous articles about collimation. All of this was to no avail. To put it bluntly, I was frustrated to the point that I was seriously considering selling my telescope.

All this changed when I made a phone call to club member Darrell Chatfield and asked if I could bring my telescope over for him to try to collimate it. In the course of our conversation to make those

arrangements, I told him all the things that I had tried so far. After listening for five minutes, he happened to ask if I removed the mirror from the cell when cleaning. I said that normally, I left it in the cell, but the last time (i.e. 14 months ago), I had removed it. Without skipping a beat, he stated that my problem may be that I had overtightened some or all of the clips when replacing the cleaned mirror, causing what is most often referred to as primary mirror astigmatism.

I was excited, mostly because that is the one thing I had not checked. Sure enough, when I removed the cell and mirror, one of the clips had clearly been overtightened. A simple loosening of all the clips, and the mirror collimated perfectly. That night, I saw the rings of Saturn properly for the first time since they had reappeared after being edge on.

It's like my telescope is brand new all over again. And to think, I spent 14 months fighting collimation when a 20-minute phone call to Darrell could have solved my problem and in the end did. Members really do have a lot to offer, and I wish to thank Darrell not only for solving my collimation dilemma but also for coming up with a unique way of raising the height of my Dobsonian telescope by making removable legs using PVC threaded pipe. I followed his instructions as presented at our June meeting, and now for the first time, my telescope is at the right height for me.

Thanks so much Darrell — I now have a beautifully collimated telescope raised 7" higher thanks to you.



Ron Waldron with his now correctly collimated telescope



Removable Chatfield legs make all the difference to one's mount

Photos by Ron Waldron

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 II, 140 Lunar, or 35 Binocular objects, or Explore the Universe 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

Ken Maher	Done!	110
Norma Jensen		108
Ron Waldron		105
Kathleen Houston		90
Margo Millar		77
Wade Selvig		75
Garry Stone		57
Barb Wright		40
Wayne Schlapkohl		36
Ellen Dickson		32
Jeff Swick		24
Bruce Brandell		5



The Messier & Finest NGC lists can be found in the *Observer's Handbook*.

The Explore the Universe list is available on the National website.

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

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

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

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

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

Copies of the Isabel Williamson Lunar Observing Program Guide can be purchased at meetings.

Program details can be found at: <http://www.rasc.ca/williamson/index.shtml>

Observers Group Notes

by Larry Scott



Our June 12 Observers Group saw four members out at Sleaford. We enjoyed clear skies and fair seeing for the evening. Temperature was cool for June at 8°C, but it did keep the mosquitoes to a tolerable level. Although it never really gets dark

here in June, we did manage to get some observing in. Early on, we caught Venus and Saturn, and later, there were M3, M13, M11, and the Swan Nebula. During

the darkest hour from 00:45 to 01:45, we checked out comet C/2009 R1 (McNaught). Unfortunately, as it was rising in the northeast, so was the light of dawn. By 2:00 am, we could definitely see the sky beginning to brighten. On the plus side, this also brought us a small display of noctilucent clouds.

Next scheduled Observers Group will be August 7. A little warm-up to check out our equipment before SSSP. Hope to see you there.